SESSIONAL PAPERS.

VOLUME V.

FIFTH SESSION OF THE FIRST PARLIAMENT

OF THE

DOMINION OF CANADA.

SESSION 1872.

PRINTED BY I. B. TAYLOR, 29, 30 & 31, RIDEAU STREET, OTTAWA.

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LIST OF SESSIONAL PAPERS,

VOL. V., SESSION 1872,

ARRANGED ALPHABETICALLY.

	NO.
Agriculture	2 A
Appeal Cases	45
Arbitrators	72
Bank of Upper Canada	21
Banks, Shareholders	13
Baptisms, Marriages, and Burials	12
Bay Verte Canal	62
Bonded Goods, U.S.	65
Bossé, Hon. Mr. Justice	39
British Columbia, Report on	10
" " Elections	59
Canada Pacific Railway	33
Census	14
Crimping Business	68
Cooke, W.	5
Copyright	54
Customs' Duties, Hudson's Bay	41
Corporal Punishment	55
Departmental Clerks	47
" Printing	50
Dockyard, Halifax	73
Dominion Notes	20
Emigrants, Fort Garry	64
Employés, Dominion Government	38
Estimates	1
Fees, Lumbermen	69
Fenian Invasion	26
Fisheries	5
Geological Survey	31
Grenville Canal	51
Guelph, Port of	66
Halifax Post Office	40
Halifax Provincial Buildings	29
Hamel, A.	37
Horton, C. H., Schooner	5
Hudson's Bay Customs' Duties	41
Indians, Northumberland	28
Indians, Iroquois	49
Indian Reserve, Sarnia	60
Inland Revenues	6
Insurance	9
Intercolonial Railway	25
Intoxicating Drinks, N. W. T.	57
Johnson, F. G.	19
Joliette Mail Service	46
Library of Parliament	11
Lighthouses	56
Lumbermens' Fees	69
Mail Service, Joliette	46
Manitoba (Military Expedition)	15
" Recorder of	19
" Emigrants	64
" Fenian Invasion	26
" Laws	58
" Elections	59
Marine and Fisheries	5
Meterological Observations	53
Militia	8
Miramichi River Bridge	25
Miscellaneous Statistics	7
Mud Lake	67
New Brunswick School Act	36
North West Boundry	48
North-West, Intoxicating Drinks	57
Paspebiac Harbor	43
Penitentiaries	27
Perley, M., (C. E.)	32

	NO.
Pilots	5
Ploughs	66
Port Colborne Harbor	71
Postmaster General	2
Post Office, Quebec	70
Printing, Confidential	50
Province of Canada, Debt of	35
Provincial and Dominion Notes	20
Provincial Buildings, Halifax	29
Province of Canada, Debt of	35
Public Accounts	1
Public Works	4
Receipts and Expenditure	24
Red River	19
School Act, N. B.	34
Secretary of State	22
Shippegan Gully	63
Shultz, John	19
Statistics, Municipal	7
Statutes	23
St. Clair Flats Canal	44
Superannuations	17
Thames and Sidenham Rivers	42
Trade and Navigation	3
Treaty of Washington	18
Trider, Albert	30
Unforeseen Expenses	16
Washington Treaty	18
Welland Canal	52
West India Trade	61
Windsor and Halifax Railway	30
Windsor and Annapolis Railway	34

LIST OF SESSIONAL PAPERS

ARRANGED NUMERICALLY AND IN VOLUMES.

CONTENTS OF VOLUME NO. 1.

No. 1 .. PUBLIC ACCOUNTS OF THE DOMINION OF CANADA :—For the fiscal year ended 30th June, 1871.

ESTIMATES :—Sums required for the service of the Dominion of Canada, for the year ended 30th June, 1873.
Supplementary ;—for the year ending 30th June, 1872.
Supplementary ;—for the year ending 30th June, 1873.

CONTENTS OF VOLUME No 2.

No. 2 .. POSTMASTER GENERAL :—Report of, for the year ended 30th June, 1871.

No. 2A .. AGRICULTURE :—Report of the Minister of, for 1871.

CONTENTS OF VOLUME No 3.

No. 3 .. TRADE AND NAVIGATION, DOMINION OF CANADA :—Tables of, for the year ended 30th June, 1872.

No. 4 .. PUBLIC WORKS :—Report of the Minister of, for the year ended 30th June, 1872.

CONTENTS OF VOLUME No. 4.

No. 5 .. MARINE AND FISHERIES :—Annual Report of the Department of, for the year ended 30th June, 1872.

——————Reports of the Minister of Marine and Fisheries; and memorandums and documents prepared for the Honorable Mr. *Campbell* in connection with his mission to England; and despatches from his Excellency the Governor General to the Colonial Secretary, on the subject of the Fisheries, &c., &c., *Not printed.*]

——————Correspondence &c., relating to the conduct, suspension and dismissal of Mr. *W. Cooke*, Fishery Overseer, in the County of Bonnaventure. [*Not printed.*]

——————Correspondence between the Dominion and Imperial Governments, relative to the illegal abduction, by American Citizens, from the Port of Guysboro', in Nova Scotia, of the American Fishing Schooner, *C. H. Horton*, while awating the action of the Court of Admiralty in Canada.

——————Correspondence between the Minister of Marine and Fisheries and the Imperial Board of Trade, relative to the granting of Masters' Certificates of competency to pilots.

CONTENTS OF VOL. NO. 5.

No. 6 .. INLAND REVENUES OF DOMINION OF CANADA :—Report, Returns, and Statistics of, for the year ended 30th June, 1871.

No. 7 .. MISCELLANEOUS STATISTICS OF CANADA for the year 1869–70. Part I. Municipal Returns, Ontario.

No. 8 .. MILITIA :—Report on the State of the Militia of the Dominion of Canada, for the year 1871.

CONTENTS OF VOL. NO. 6.

No. 9 .. INSURANCE :—Statements made by Insurance Companies in compliance with the Act 31 Vict., cap. 48, sec. 14.

No. 10 .. BRITISH COLUMBIA :—Report of the Hon. H. L. Langevin, C.B., Minister of Public Works.

No. 11 .. LIBRARY OF PARLIAMENT :—Report of the Librarian on the State of.

No. 12 .. BAPTISMS, MARRIAGES, AND BURIALS :—General Statement of, for certain Districts in the Province of Quebec. *(Not Printed).*

No. 13 .. BANKS :—Lists of the Shareholders of the several Banks of the Dominion of Canada, in compliance with the Act 34 Vic., cap. 5, sec. 12.

No. 14 .. CENSUS :—Returns for the year 1871, taken under the Act 33 Vic., cap. 21. *(Not Printed).*

——————Report of things done under "The Census Act," in conformity with the 27th section of the said Act. *(Not Printed).*

No. 15 .. MANITOBA EXPEDITION :—Statement of Expenditure made on account of, under authority of a Special Warrant issued by His Excellency the Governor General, according to provisions of Act 31 Vic., cap. 5, sec. 35, clause 2, and Order in Council, 17th October, 1871.

——————Order in Council, dated 17th October, 1871, respecting the appropriation of $100,000 to meet the expenditure of the expeditionary force about to proceed to the Province of Manitoba.

No. 16 .. UNFORESEEN EXPENSES :—Return of Warrants issued under authority of orders in Council, from 1st July, 1871, to 31st March, 1872, and charged to appropriation for Unforeseen Expenses, granted by Act 34 Vic., cap. 1, schedule B.

No. 17 .. SUPERANNUATION :—Statement of all allowances and gratuities granted under the Act 33 Vict., Cap. 4, intituled : An Act for the better ensuring the efficiency of the Civil Service of Canada, by providing for the superannuation of persons employed therein in certain cases.

——————Statement of the cases in which additions have been made to the actual number of years' service of persons employed in the Civil Service who have been superannuated, under the provisions of the Act 33 Viet., Cap. 4.

No. 18 .. WASHINGTON TREATY :—Message from His Excellency the Governor General transmiting for the information of the House of Commons certain Despatches and Minutes of the Privy Council, having reference to the Treaty of Washington.

——————Message from His Excellency the Governor General transmiting for the information of the House of Commons, certain Despatches and Correspondence between the Governments of Nova Scotia, Newfoundland and Prince Edward Island and the Imperial Government, in reference to the Fishery Clauses of the Treaty of Washington.

No. 19 .. RED RIVER :—Schedule of claims arising out of the late Insurrection at Red River, reported on by the Hon. the Recorder of Manitoba.

——————Return to Address for a statement in detail of all the claims made by the different persons named in the Report of F. G. Johnson, Commissioner, to whom were referred for investigation the claims of sufferers by the Insurrection in Ruperts Land, in 1869-70; shewing item by item the nature of the claims, &c.; also, of the instructions which were given to the said Commissioner Johnson. [*Not printed.*]

——————Return to Address, for a statement in detail of all the claims made by John Schultz, Esquire, and filed either with the Government or with the Recorder Johnson, shewing item by item the nature of these claims, the proof produced in their behalf, &c. Also copies of the Instructions which were given to the said Recorder Johnson, regarding these claims, &c. [*Not Printed.*]

No. 20 .. PROVINCIAL AND DOMINION NOTES :—Circulation statement of Provincial and Dominion Notes to the 31st March, 1872. [*Not Printed.*]

No. 21 .. BANK OF UPPER CANADA :—Statement of Affairs of the estate of the Bank of Upper Canada on the 31st March, 1872, compared with the Statement of

the 30th June, 1871, returned to Parliament in accordance with the Acts 33 Vict., Cap. 40, Sec. 9, and 34 Vict., Cap. 8, Sec. 9.

CONTENTS OF VOL. NO. 7.

No. 22 .. SECRETARY OF STATE FOR CANADA :—Report for the year ending 30th June, 1871.

——————Report of the Indian Branch of the Department of the Secretary of State for the Provinces.

No. 23 .. STATUTES OF CANADA :—Official distribution of the Statutes of Canada, 34 Victoria, being the Fourth Session of the First Parliament, 1871, under the provisions of the Act 31 Vict., Cap. 1, Sec. 14. [*Not printed.*]

No. 24 .. RECEIPTS AND EXPENDITURE OF CANADA :—Statement of Receipts and Expenditure of Canada, from the 1st July, 1861, to the 31st March, 1872.

No. 25 .. INTERCOLONIAL RAILWAY :—Annual Report of the Commissioners.

——————Copies of all correspondence between the Government and all other parties, such as Engineers and Contractors, respecting the Interclonial Railway Bridge to be constructed across the Miramichi River.

——————Return to Address, Statement of all costs and charges connected with the survey and management of the Intercolonial Railway, since the date of last Return made to this House on the subject, up to the present time; shewing in separate sums the amount of travelling and other expenses of the Commissioners, including all the expenses of the Commissariat Office, since the above date.

——————Return to Address, Papers, Letters and Documents that have passed between the Government of the Dominion, the Commissioners on the Intercolonial Railway, and other persons interested in the following matters, viz. :—As to the rent paid by the said Commissioners, for the use of the House now occupied at Newcastle, by A. Light, Esq,, and the Intercolonial Office, stating who was the owner.

1st.—Of the said House at the time it was so rented.

2nd.—Of the lands taken for the Railway Station.

3rd.—Of the Old Ship Yard intended for Water terminus.

4th.—Of the Old Commercial Buildings now occupied as the Custom House at Newcastle, specifying separately the amount paid yearly for rent, the land damages, and the price paid or to be paid for each of the said premises, and to whom, when and how?

No. 26 .. FENIAN INVASION, CANADA :—Return to Address, Copies of all Despatches and correspondence between the Dominion Government and the Imperial Government, relative to the claims arising from the Fenian Invasion of Canada, &c., and of the account of the Fenian Brotherhood drawn up by Lord Tenterden.

——————MANITOBA :—Return to Address, Copies of all correspondence with Lieut. Governor A. G. Archibald, of Manitoba, and Mr. McMicken, Land Commissioner, regarding the Fenian Invasion of Manitoba; and the intercourse of the said Lieut. Governor with Louis Riel, &c.

No. 27 ... PENITENTIARIES :--Report of the Directors of Penitentiaries of the Dominion of Canada, for the year 1871.

No. 28 .. INDIANS :—Return to Address, Copies of all correspondence relative to the appointment of a Commissioner or Commissioners for the Indians in Northumberland, N. B. [*Not Printed.*]

No. 29 .. PROVINCIAL BUILDINGS, HALIFAX :—Message from the Governor General transmiting certain correspondence, with the award of the Arbitrators on the Claims of the Government of Nova Scotia, in connection with the Provincial Buildings at Halifax.

No. 30 .. TRIDER, ALBERT :—Return to Address, Official Reports relative to the death by an accident on the Government Railway between Windsor and Halifax ; of Albert Trider, an Employé on the road ; the proceedings on the Coroner's Inquest ; and also a Return of all accidents on the road. [*Not printed.*]

No. 31 .. GEOLOGICAL SURVEY :—Account of the moneys expended under the authority of the Act 31 Vict., Cap. 67 ; on account of the Geological Survey of Canada, for the year ending 30th June, 1871.

———————Summary Report of Geological Investigations, dated the 20th May, 1872.

No. 32 .. PERLEY, M. (C. E.) :—Return to Address, Reports made by Mr. Perley, C.E., on the most practicable and effectual means of securing and maintaining unimpeded navigation of the River St. John, at or near the Oromocto Shoals (so called.) [*Not printed.*]

No. 33 .. CANADIAN PACIFIC RAILWAY :—First Progress Report on the Canadian Pacific Railway, by Sanford Fleming, Esq., Engineer-in-Chief.

———————...Return to Address, Copies of all instructions to, and correspondence with the Engineers in charge of Divisions B. C. D. and E., of the Canadian Pacific Exploratory Survey, and of any report of investigation into the cause of the failure of Division C., of said Survey, &c. [*Not printed.*]

No. 34 .. WINDSOR AND ANNAPOLIS RAILWAY :—Return to Address, Correspondence between the Government and the Windsor and Annapolis Railway Company ; including any memorials or protests addressed to the Government by the Company, and of any agreements made between the Government and the Company of the Government Railway between Windsor and Halifax, on their enjoyment of running power over the said Road. [*Not printed.*]

No. 35 .. PROVINCE OF CANADA, DEBT OF :—Return to Address, Correspondence between the Government of the Dominion, and the Governments of the Provinces of Quebec and Ontario, on the subject of the division of the surplus of the debt of the former Province of Canada, &c. ; and correspondence with the Governments of the different Provinces of the Dominion with respect to applications made for additional subsidies or more favorable financial terms than granted by the Confederation Act. [*Not printed.*]

No. 36 .. SCHOOL ACT, NEW BRUNSWICK :—Return to Address, Correspondence or

other documents relating to the School Act passed by the Local Legislature of New Brunswick, between the Dominion Government and that of New Brunswick.

No. 37 .. HAMEL, A., JR. :—Return to Address, Correspondence between the Government and any officers of Customs of the Dominion, or of the United States, respecting the seizure, in the hands of Mr. A. Hamel, Junr., of a quantity of merchandize, the property of the firm of Jos. Hamel, *et frères*, of the City of Quebec. [*Not printed*]

SUPPLEMENTARY RETURN :—Ditto, ditto. [*Not printed.*]

No. 38 .. EMPLOYES, DOMINION GOVERNMENT :—Return to Address, names, origin, creed, position and pay of all Employès of the Dominion Government,—with statements from all the Public Departments, and from the Senate, the House of Commons, and the Intercolonial Railway Commission.

No. 39 .. BOSSÉ, HON. MR. JUSTICE :—Return to Address, Correspondence between the Government of the Dominion, and of the Province of Quebec, and the Hon. Mr. Justice *Bossé*, with respect to the refusal of that Hon. Judge to comply with the Order of the Government of Quebec, directing him to reside at Montmagny, in the District of Montmagny. [*Not Printed.*]

No. 40 .. HALIFAX POST OFFICE :—Return to Address, Correspondence passed between the Portmaster of Halifax, N.S., and the Hon. Postmaster-General, relative to the abstraction of Money letters from the Post Office. [*Not printed.*]

No. 41 .. CUSTOM'S DUTY, HUDSON'S BAY :—Customs' Duties collected at Hudson's Bay Ports, on Hudson's Bay, 1868-69, 1869-70, and 1870-71. [*Not printed.*]

No. 42 .. THAMES AND SYDENHAM RIVERS :—Return to Address, Plans, reports, specifications and contracts relating to the improvement of the navigation of the Rivers Thames and Sydenham, since 1867.

No. 43 .. PASPEBIAC HARBOR :—Return to Address, Correspondence, reports and plans relating to the Paspebiac Harbor roadstead ; (first), as a Harbor of Refuge ; (second), as a Winter Harbor, communicating with the Intercolonial Railway.

No. 44 .. ST. CLAIR FLATS CANAL :—Return to Address, Report of Engineers or others appointed to investigate the location of the Canal across the St. Clair Flats, on the Canadian side of the Channel, by the Government of the United States.

No. 45 .. APPEAL CASES :—Return to Address, Statement of the number of cases which, from the 1st January, 1369, to the 1st January 1872, were taken before Her Majesty in Her Privy Council, on appeal of the Judgments rendered in each of the Provinces of Ontario, Quebec, New Brunswick and Nova Scotia. [*Not printed.*]

No. 46 .. MAIL SERVICE, JOLIETTE :—Return to Address, &c., relative to the establishment of a daily Mail Service between Joliette, St. Ambroise de Kildare, and the Melaine d'Aillebart, in the County of Joliette. [*Not printed.*]

No. 47 .. DEPARTMENTAL CLERKS :—Return to Address, Showing all sums of money

paid to any Departmental Clerk or Officer, by way of extra pay for extra writing or otherwise, at any time during the fiscal year ending 30th June 1871. [*Not printed.*]

——————————Return to Address, Shewing all sums of money charged or received on account of Salaries, extra services, travelling expenses, or on any other account, by the several Deputy Heads and Officers of Departments at Ottawa, &c. [*Not printed.*]

No. 48 . NORTH WEST BOUNDARY :—Return to Address, Correspondence between the Dominion Government and the Government of Ontario, respecting the North West boundary of Ontario.

No. 49 .. INDIANS, IROQUOIS :—Return to Address, Correspondence since the 1st November last, between the Government, the Agent at Caughnawaga, and the Iroquois Indians relative to the conduct of the Chiefs of those Indians. [*Not printed.*]

No. 50 .. PRINTING, CONFIDENTIAL :—Return to Address, Accounts paid or received for Departmental and Confidential Printing, since the date of last Returns, with the Orders in Council, and all other documents relating thereto ; and of all accounts paid or received for Binding, since the work was given without tender to the present contractor.

No. 51 .. GRENVILLE CANAL :—Return to Address of the 25th ult. ; for copies of all tenders sent in for repairing or enlarging the Grenville Canal ; and also for copies of all contracts entered into, Orders in Council, and all other documents relating thereto. [*Not printed.*]

No. 52 .. WELLAND CANAL :—Return to Address, Reports by the Engineer in charge of the survey of the Welland Canal, in 1871, giving the quantity of earth and rock excavation required to be done to complete the Canal for Lake Erie level, by Port Colborne and Port Maitland route respectively ; also, copies of all Reports on the same subject by the Chief Engineer of the said Department. [*Not printed.*]

No. 53 .. METEOROLOGICAL OBSERVATIONS :—Return to Address, Correspondence with the Government of the United States, and persons in the Dominion, on subject of Meteorological observations and Weather reports.

No. 54 .. COPYRIGHT :—Return to Address, in relation to the question of Copyright. [*Not printed.*

No. 55 .. CORPORAL PUNISHMENT :—Return to Address, Cases in which the sentence of corporal punishment has been carried into effect in Canada. [*Not printed.*]

No. 56 .. LIGHTHOUSES :—Return to Address, Tenders for the supply of Coal for Light-House purposes, for the years 1870, 71 and 72 ; with the Reports of the Inspectors on Samples. [*Not printed.*]

No. 57 .. NORTH WEST TERRITORIES, INTOXICATING DRINKS :—Return to Address, Correspondence between the Government and the Lieut. Governor of Manitoba and the North-West Territories, having reference to the introduction of intoxicating drinks, arms, ammunition and other supplies, for sale or disposal, to natives of the said Territory, and others residing therein. [*Not printed.*]

No. 58 .. MANITOBA LAWS :—Return to Address, Laws of Manitoba, enacted during

the last Session of the Local Legislature, relating to the registration and qualifications of Electors; and the constitution of a Supreme Court. [*Not printed.*]

No. 59 .. ELECTIONS, BRITISH COLUMBIA AND MANITOBA:—Return from the records of the Elections to the present House of Commons, in British Columbia and Manitoba, showing the aggregate number of votes polled in each Electoral Division in which there has been a contest, with the total number polled in each such Division, and the number of votes on the voters' lists of the same respectively, and the population in each constituency as shown by the last census prepared by the Clerk of the Crown in Chancery.

No. 60 .. INDIAN RESERVE, SARNIA:—Return to Address, Correspondence between the Secretary of State for the Provinces, and any party or parties, including Officers of the Department, respecting Lot 51, Front of the Indian Reserve at Sarnia. [*Not printed.*]

No. 61 .. WEST INDIES TRADE:—Return to Address, Correspondence, &c., since the 1st July, 1867, relating to trade relations between Canada and the West Indies.

SUPPLEMENTARY RETURN:—Ditto, ditto. [*Not printed.*]

No. 62 .. BAY VERTE CANAL:—Return to Address, Report and Estimates relating to the Bay Verte Canal.

No. 63 .. SHIPPEGAN GULLY:—Return to Address, Correspondence, Orders in Council, Reports, Estimates relating to the deepening of Shippegan Gully. *(Not Printed).*

No. 64 .. EMIGRANTS, FORT GARRY:—Statement shewing the expenses of maintaining teams and men at Prince Arthur's Landing, for the conveyance of emigrants to Fort Garry; also for the same service from the Western terminus of the Lake Superior and Shebandowan Road to the Western side of the Lake of the Woods; and from the Lake of the Woods to Fort Garry; also the number of emigrants conveyed over said route.

No. 65 .. BONDED GOODS, U.S.:—Return to Address, Correspondence relative to fees charged by American officials on goods and produce passing through the United States in bond.

No. 66 .. PLOUGHS:—Return to Address, Number of Double furrow ploughs entered at the Port of Guelph, the value and the number on which duty has been paid, the number (if any) passed free of duty. *(Not Printed).*

No. 67 .. MUD LAKE:—Return to Address, Correspondence relating to the building of the Dam across the outlet of Mud Lake, in the Township of Bedford, in the County of Addington, Ontario, in the year, 1871. *(Not Printed).*

No. 68 .. CRIMPING BUSINESS:—Return to Address, Correspondence since 1st July, 1869, relating to the shipping or desertion of seamen, or what is known as the Crimping business. *(Not Printed).*

No. 69 .. LUMBERMEN FEES:—Return to Address, Tariff of fees, under Chapter 46 of the Consolidated Statutes of Canada, now charged to lumbermen for supplying specifications, and allowed to Cullers for measuring, etc., respectively. *(Not Printed).*

No. 70 .. | Post Office, Quebec :—Return to Address, Tenders received for the heating apparatus in the Post Office, Quebec, with the Report of the Chief Architect of the Department of Public Works thereon. *(Not Printed).*

No. 71 .. | Port Colborne Harbor :—Return to Address, Tenders received by the Department of Public Works, for the excavation of earth and rock, in deepening and improving Port Colborne Harbor, on Lake Erie, last year. *(Not Printed).*

No. 72 .. | Arbitrators :—Address shewing all the cases which have been decided by the Dominion Board of Arbitrators since Confederation; with the awards made, and all the amounts paid to the said Arbitrators as salaries and travelling expenses, or any other account. *(Not Printed).*

No. 73 .. | Dockyard, Halifax :—Return to Address, Correspondence between the Imperial Government and the Government of the Dominion, respecting the proposed arrangement for obtaining a portion of Her Majesty's Dockyard at Halifax, as a terminus for the Intercolonial Railway. *(Not Printed).*

REPORT

OF THE

SECRETARY OF STATE

FOR

CANADA,

FOR THE YEAR ENDING THE 30TH JUNE, 1871.

.....

PRINTED BY ORDER OF PARLIAMENT.

.....

OTTAWA

PRINTED BY I. B. TAYLOR, 29, 31 & 33 RIDEAU STREET.

1872.

REPORT

OF THE

SECRETARY OF STATE OF CANADA,

FOR THE YEAR ENDING ON THE 30TH JUNE 1871.

To His Excellency the Right Honorable LORD LISGAR, *Governor General of Canada, &c., &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY :—

I have the honor to lay before Your Excellency the Annual Report of my Department for the year ending 30th June, 1871.

The number of letters received and answered in the different Branches of the Department during the year 1870–71, amounts to 9,444, exclusive of letters of simple acknowledgment of receipt, divided as follows :—Corresponding and Ordnance Lands Branches, 7,515 ; Queen's Printer Branch, 1,825 ; Dominion Lands Branch, 104, the latter embracing four months only, from March (when it was established) to July, 1871.

It was only in the course of October, 1870, that arrangements were made for the management of the lands of the Estate of the Bank of Upper Canada, which devolves upon this Department.

The object had in view by the Government in assuming the charge of this Estate, that is to say, economy in the management and a speedy settlement of its affairs, have not been lost sight of. To attain the first of these objects, the previous local staff of this unfortunate enterprise had been dispensed with, C. Gamble, Esq., of Toronto, long

connected with the Bank and familiar with its transactions, and a valuator, paid by a per centage on sales, are the only gentlemen employed outside the Departments. Col. Coffin, the head of the Ordnance Lands Branch, here, in addition to his special duties, assumed the charge of these interests without additional assistance or compensation, and has performed them with his usual accuracy and despatch. The larger and more valuable portion of these properties had been sold previous to the date of the transfer of the same to this Department, but the amount of sales made will, up to the present time, testify to the activity employed. The total is $66,678.12.

Recourse has been had whenever advantageous to auction sales, and the result has been satisfactory.

It is hoped that the remainder of these lands will be disposed of in the current year.

The Report from the Ordnance Lands' Branch marked A and appended hereto shows a very large return from sales and rents for the present year, the total amounting to $93,783, and the explanation given which assigns a part of this amount to the preceding year shows a gradual and actual progress of improvement, which is in every way satisfactory.

The experience of another year in the working of the Queen's Printer's Office has fully established the wisdom of its organization upon its present basis. The constantf supervision of the printing and binding for the several Departments, and the uniform audit of the accounts for those services as performed under contracts at a schedule of prices, tend alike to economy and uniformity of work and price—both satisfactory results. The system of the office has been so far perfected that now the cost of every detail of every job can at once be ascertained, and the account promptly closed. The basis for future contracts or other arrangements, derivable from the registered statistics of the office, will always hereafter be forthcoming when needed. It will be seen from the Queen's Printer's Report (Appendix B to this Report), that the cost of the printing and binding of the Departments has been considerably increased, but he shows at the same time so large a quantity of work performed as to account for this; and this increase of work and expenditure is explained by the Census taking and other causes referred to by him in this and his previous Report. The cost of the publication of the *Canada Gazette* has been unavoidably increased by the same causes.

The duties incumbent upon the Registrar's Branch have continued to be fulfilled with accuracy and promptness.

A large number of Indian and Ordnance Land Patents have been engrossed and recorded during the past year, and Returns of the same have been regularly sent to the respective Registrars in whose Counties the lands Patented were situated.

I have caused to be sent to the Ontario Government, when completed, the copies of Crown Land Patents, which prior to 1st July, 1867, were recorded in books, which had to be kept, inasmuch as in them were registered Patents for the Indian and Ordnance Lands. They could not therefore be transferred to that Province. These documents covered over 1,700 pages of large paper.

The number of Officers' Bonds recorded in the Branch during the year, is 250.

Since my last Report the North West Territories have been transferred to and become

part of the Dominion of Canada, and by Sec. 34, Chap. 42 of 31 Victoria, are under the management of this Department.

The extensive Territory thus transferred possesses a very large area suitable for the growth of wheat and coarse grains, roots and vegetables, second to no country on this continent.

The statements made as to the great fertility and productions of the soil are fully verified by those who within the last few years have visited that country, or made it their home.

Valuable minerals, among others gold, silver, and coal, are known to exist in it. With regard to the latter, its importance, in view of the extent of prairie in the Territories, it would be difficult to over-estimate; and steps are contemplated during the coming season which will in part elicit information as to the character and extent of this deposit.

The northern portion of this Territory, where it ceases to be valuable for agricultural purposes, is valuable as being the great fur-producing region of this continent.

The Province of Manitoba, to which the attention of this Department has been in most part directed, is taken out of the south-east portion of the Territories, and embraces the land contained between the 96th and 99th meridian west of Greenwich, and between the international boundary or 49th parallel of latitude, and latitude 50° 30'; it covers about 13,908 square miles, equal, nearly, to 9,000,000 acres.

The liberal land policy adopted, which gives to a *bona fide* settler a homestead of one hundred and sixty acres on condition of a three years occupancy, will it is believed tend to attract a share of the emigration at present flowing from Northern and Central Europe to this part of the future great grain growing region of the Dominion.

Our own people who desire change, or those who wish to engage in farming, can here obtain a prairie home without having to sacrifice their allegiance, or disown their attachment to the British flag.

All that is necessary for the rapid settlement of Manitoba and the North West Territories, is that railway connection be had between them and the older Provinces. This will be furnished by the Canadian Pacific Railway, when constructed.

In the interim the "Dawson route," which passes through our own country, will provide a good highway for summer travel. The Red River, which has been tapped by the American lines of railway, can also be used to good purpose during the season of navigation.

To meet the requirements of settlement a large number of surveyors were employed during the past year, for whom, and the working parties they required, provisions had to be sent into the Province; these were furnished to them at cost price, with freight and all other expenses added.

Supplies, in like manner, have been ordered to meet the wants of the largely increased surveying staff to be employed during the coming season.

For the conducting of those surveys and the management of these lands a branch has been added to this Department, known as the Dominion Lands Branch, at the head of which John Stoughton Dennis, Esq., has been placed with the title of Surveyor-General.

Knowing the great interest taken in all land matters in Manitoba, I append his Report (see Appendix C), which shows the work performed by the Surveyors up to the close of the year. It also shows that, notwithstanding the delays caused by smoke and fires, the season's operations have been very satisfactory.

It may be of some interest to add that Mr. McMicken, Land Agent at Winnipeg, has been furnished with maps of the Townships surveyed, so that he is now prepared to deal with all parties who may desire to make entries for lands either by sale, pre-emption or homestead.

All of which is respectfully submitted,

J. C. AIKINS.

APPENDIX A.

DEPARTMENT OF THE SECRETARY OF STATE,
ORDNANCE LANDS' BRANCH,
OTTAWA, 27th February, 1872.

SIR,—I have the honor to submit a report on the transactions of this branch of your Department to the close of the fiscal year, terminating 30th June, 1871.

Auction sales have been made of building lots laid off for that purpose, at the following places, which realized also the following prices :—

Chambly	$9,119 18
Coteau du Lac	1,501 00
Cornwall	352 00
Prescott	2,333 00
Ottawa	9,980 00
Toronto	24,571 88
	$47,857 06

payable on time, the first instalment having been paid at the time of sale.

Active exertions on the part of the Branch, and the improved condition of the country at large, have resulted in the collection of a large amount of arrears. A generous policy towards purchaser and tenant accompanied by a pressure, which has never been oppressive, has produced its natural fruits. We have very few absolute defaulters, and the lots held by these parties, on cancellation of sale under the statute, will now sell more advantageously then heretofore. The collections made for the year ending 30th June, 1871, partly derived from rents, and partly from instalments on account of sales, amount to the sum of $93,733:88. It is right to observe that of this sum $24,228:88, ought to have gone to the credit of last year, but was received a few days after its fiscal termination, which would have made the returns for 1870, $73,845:40, instead of $49,616:52, and those of the present year 1871, $69,505, thus distributing the amount above first mentioned in a more equal ratio, and showing a more regular and healthier rate of annual improvement. The returns since the advent of confederation have been

1867	$45,981 85
1868	44,645 48
1869	48,219 22
1870	73,845 40
1871	69,505 00

With respect to the work done in this office, I can only repeat what was said last year, that it is difficult to form any precise or tangible estimate. The "handwork" may to a certain extent be judged of by the folios covered with writing—856 folios, representing about 1,100 letters despatched, in answer to 700 letters received, by 87 drafts of Letters Patent prepared, and 151 assignments registered and transfers made, after a careful examination of wills and documents, but the amount of "headwork" required to digest and and mature the material of the above correspondence can only be gauged and measured by men who have been engaged in like occupations. The office hours are from nine to four and the work is rarely intermitted.

The account books of the office are laboriously kept and in a style of carefulness and neatness worthy of all praise.

The miscellaneous work which arises hourly requires constant attendance, to answer

enquires, to make explanations, which also lead to searches and other enquiries, and creates a routine which never ceases.

From daily intercourse with this Branch and its operations, you are yourself, Sir, best able to judge of the accuracy of the above statements.

I have the honor to be, Sir,
Your most obedient servant,

WILLIAM F. COFFIN,
Ordnance Lands' Agent.

APPENDIX B.

To the Honorable James Cox Aikins,
Secretary of State of Canada,
&c., &c., &c.

SIR,—I have the honour to report that the printing services under the supervision of this office, have been generally performed during the past year in a satisfactory manner; and the method of ordering work, of accounting and of auditing the printing accounts has been more completely systematised. This, however, has thrown a good deal of extra work upon the office, and I found it necessary on the 28th June last to ask for the assistance of another clerk, who should act as book-keeper and engrossing clerk, in order to keep the books and registers of the office properly and punctually written up. His Excellency in Council was pleased, on your recommendation, to grant the application on the 31st July last. In support of my application, I pointed out that a very considerable increase of business had taken place, the number of requisitions for departmental printing, &c., for the six months ending November 1st, 1870, having been about 750 or 125 per month; for the next six months they rose to 1,119, or 186 per month, and for the 2 months then just closing they had been 432, or 216 per month, or an average of nearly 194 per month for the eight months against 125 per month for the previous six months, an increase of over 55 per cent. since the theoretical organization of the office had been settled.

I also pointed out on that occasion that each of these orders or requisitions involved—

1st. The issue of requisitions;
2nd. The necessary supervision to see the work executed in time;
3rd. The receiving, counting and examining it;
4th. Delivery to the Departments, and taking receipts therefor;
5th. Registering requisitions, receipts and deliveries;
6th. Checking the accounts when sent in;
7th. Registering the accounts;
8th. Transmitting accounts to Departments and schedules thereof to Clerk of Contingencies, and issuing certificates to the contractor.

To this is to be added the work of making out all accounts, collecting all subscriptions and fees for advertisements for the *Canada Gazette*, and accounting for the same, checking the bills for printing, and securing a proper supply of paper for this, the statutes and other printing work. Besides this, if the superintendence of the printing, binding and distribution of 15,000 to 25,000 volumes of statutes, the registering such distribution and the accounting for all deliveries and casual sales is taken into account, it will be seen that the increase asked for was needed for efficiency.

This addition to the office staff has justified itself by the result, in the greater facility afforded for answering references from other Departments, for superintending the progress of the work and checking the accounts when it has been performed. The amount of printing and other work is set forth in tables below, shewing a total of nearly 70,000 volumes of books, pamphlets and maps printed, bound, ruled or mounted, and nearly five-and-a-half millions of forms printed, ruled, &c.

The Canada Gazette.

The anticipations respecting the decline in the subscription list of the *Canada Gazette*, stated in my report of last year, have been fully realized, the number of paying subscribers having been reduced to 49. The total numbers printed week by week to supply official persons, subscribers and advertisers, and to meet casual demands, have ranged from 978 to 1,069.

The receipts for the fiscal year have been,—

From advertisements	$605 98
do Subscriptions.	300 07
do Sale of *Gazettes*	4 69
	$910 74

The expenses on the other hand have been,—

For paper	$916 03
do Printing, despatching, &c.	1,983 86
Total	$2,899 89

Shewing a loss of $1,989 15.

This is considerably in excess of my estimate of the deficit; but the amount has been swollen by the cost of printing the very heavy extra Gazettes necessary for the Census, for which I had not last year made sufficient allowance.

The Statutes.

I subjoin a statement of the cost of the publication and distribution of the Statutes passed during the last Session of Parliament. An increased demand being sure to arise from the entrance of Manitoba and British Columbia into the Dominion, a larger number of copies were ordered to be printed than in 1870, the gross expenditure being thereby increased; and this expenditure has been increased further by binding a somewhat larger number in full and half calf, and by increased express charges on the copies sent to the Maritime Provinces and Manitoba; but the cost per volume and per sheet is the same as last year, as will be seen by the following statement:—

Cost of Statutes.

	English, 17,500 copies.		French, 5,000 copies.		Total 22,500 copies.
Paper.					
Paid James Cotton	528 reams, 8 quires, 8 sheets, at $2.99	$ cts. 1,580 00	166 reams, 11 quires, 19 sheets, at $2.99	$ cts. 488 14	$ cts. 2,068 14
Printing.					
Paid I. B. Taylor:—					
Composition		64 80		78 90	143 70
Press-work		294 00		96 00	390 00
Proofs, corrections, &c.		15 60		7 90	23 50
					557 20
Binding.	Copies.		Copies.		
Paid A. Mortimer:—					
Half Sheep	17,263	1,985 24	4,918	565 57	2,550 81
Half Calf	64	33 28	26	13 52	46 80
Full Calf	171	136 80	55	44 00	180 80
Extra	2	3 10	1	1 55	4 65
					2,783 06
Despatching.					
Paid A. Mortimer		236 24		63 12	299 36
do Canadian Express Co.					392 16
					$691 52

RECAPITULATION.

Paper	$2,068 14
Printing	557 20
Binding	2,783 06
Distribution	691 52
	$6,099 92

This is about 27 cents per volume, or 2 cents per sheet for the 13½ sheets forming the volume. The average for the years 1868 and 1869 was 3⅕ cents per sheet, which would have made the present volume cost over 43 cents, or the whole edition $9,675 Thus the volume of 1871 is cheaper by about 16 cents per volume, and $3,575 on the edition.

Departmental Printing, Binding, &c.

As anticipated when my last annual report was made, the work done, and consequently its cost have been much greater in the past financial year than in that which preceded it; and, in so far as I have been able to ascertain, in consequence of the causes there indicated, viz., the gradual exhaustion of the previous stock of forms &c. on hand when the new system was begun, the more constant conformity of officials in the outside service with the rule of ordering all work to be done here by the contractor, the addition of Manitoba and British Columbia, and the Census.

The subjoined table of work done during the twelve months ending 30th June last shows how much labour has been performed :—

No. of Requisitions issued.	No. of Jobs of Work.	No. of Volumes bound, or printed, bound, &c.	No. of Impressions of Forms, printed, ruled, &c.
2,066	3,282	69,848	5,485,984

It will be seen by the tables subjoined that the cost of these services performed by the contractor for the year ending 30th June last was $37,888.06, and with paper furnished through this office (amounting to $3,558.91) to $41,446.97.

The total cost of these services for the year ending October 12th, 1871 (without paper) was $39,345.83 for ordinary work, and $1,065.78 for confidential, making a total of $40,411.61, as against $27,678.66 for the previous year, or an increase of about 50 per cent.

I learn from the Stationery Office that the cost of paper and other stationery, &c. furnished through that office for the past year has also risen to $41,197.95, making the total cost of the two $81,609.56, as against $47,582.62 in the year 1869-70, or an increase of $34,026.94; but of this there is chargeable to account of census :—

Amount of printing account through this office.....				$5,657 04
do	Paper	do	do	3,529 95
do	do	do	Stationery Office.. ...	9,927 86
Total.....				$19,114 85

Thus more than one-half of the increased cost of these services is due to this work, which is rather chargeable to ten years than to one or two.

I subjoin tables similar to those appended to my report of last year, and have the honor to remain,

Sir, your very obedient humble servant,

B. Chamberlin,
Queen's Printer.

Ottawa, 30th November, 1871.

Cost of Departmental Printing, &c., for the years ending June 30th, 1871, and October 12th, 1871.

Month.	Year.	Year ending 30th June, 1871.	Year ending 12th Oct., 1871.	Year ending 15th Oct., 1870.
		$ cts.	$ cts.	$ cts.
July	1870	2,696 32		
August	,,	1,859 56		
September	,,	2,347 03		
October	,,	5,448 04	2,079 67	2,773 99
November	,,	1,554 97	1,552 67	
December	,,	2,329 08	2,328 08	1,240 54
January	1871	2,608 89	2,608 89	913 38
February	,,	3,777 79	3,777 79	943 15
March	,,	4,382 65	4,382 65	2,865 71
April	,,	3,198 29	3,198 29	2,391 75
May	,,	2,698 75	2,698 75	3,198 18
June	,,	3,901 92	3,901 92	2,252 70
July	,,	.....	3,537 23	2,667 40
August	,,	.....	2,996 71	1,907 75
September	,,	....	5,044 11	2,938 24
October	,,	.....	1,239 07	3,585 87
		36,803 29	39,345 83	27,678 66
Confidential (*vide* Table below)		1,084 77	1,065 78	
		37,888 06	40,411 61	

CONFIDENTIAL.

September	1870	13 89	.....	
October	,,	5 10	.....	
November	,,	10 03	10 03	
December	,,	657 60	657 60	
January	1871	72 72	72 72	
March	,,	325 43	325 43	
		1,084 77	1,065 78	

Cost of Departmental Printing, &c., by Departments, for the years ending 30th June, 1871, and 12th October, 1871.

Department.	—	For 1 year, ending 30th June, 1871.	—	For 1 year, ending 12th Oct., 1871.	For 1 year, ending 15th Oct., 1870.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Agriculture	676 93	.....	656 02	.....	425 73
Census	5,657 04	6,333 97	5,687 23	6,343 25	
Civil Service Board	.....	4 01	.....	2 38	48 40
Clerk of Crown in Chancery	.....	353 04	.....	380 78	
Customs	.....	3,677 09	.....	3,743 30	3,472 72
Finance	1,034 74	.....	975 82	.....	
do Audit	490 68	.....	566 48	.....	1,093 18
do Treasury	99 79	.....	28 38	.....	
do Marriage License Fund	23 43	1,648 64	38 74	1,609 42	
do Stationery Office	.....	345 46	.....	321 50	290 90
Governor-General's Secretary	.....	86 74	.....	84 84	10 92
Inland Revenue	.....	5,137 35	.....	5,254 18	3,131 84
Intercolonial Railway	.....	392 08	.....	448 80	5 02
Justice	.....	240 43	.....	430 35	183 42
Marine and Fisheries	.....	1,054 58	.....	1,107 21	1,679 34
Militia	.....	1,221 05	.....	1,309 02	2,319 52
Pacific Railway	.....	7 19	.....	7 92	
Post Office	12,862 43	.....	14,225 42	.....	11,954 90
do Savings Bank Branch	980 84	13,843 27	1,257 86	15,483 28	980 33
Privy Council	.....	189 47	.....	209 59	420 36
Public Works	.....	720 92	.....	771 80	673 74
Receiver-General	.....	595 38	.....	620 47	195 41
Secretary of State of Canada	172 57	.....	242 52	.....	
do Dominion Lands	477 92	.....	609 90	.....	318 83
do Registrar's Branch	40 35	.....	31 68	.....	
do Ordnance Lands	21 61	712 45	14 31	898 41	
do Queen's Printer	.....	117 52	.....	114 92	200 80
Secretary of State for Provinces	59 35	.....	124 94	.....	
do Indian Lands	60 00	119 35	75 57	200 51	273 30
Upper Canada Bank	.....	3 30	.....	3 90	
		36,803 29		39,345 83	27,678 66
Confidential (*vide* Table below)	.....	1,084 77	.....	1,065 78	
		37,888 06		40,411 61	

CONFIDENTIAL.

Department.	Year ending 30th June, 1871.	Year ending 12th Oct., 1871.
	$ cts.	$ cts.
Finance	417 23	417 23
Marine and Fisheries	550 60	550 60
Privy Council	116 94	97 95
	1,084 77	1,065 78

APPENDIX C.

DEPARTMENT OF SECRETARY OF STATE OF CANADA,
DOMINION LANDS OFFICE,
OTTAWA, March 1st, 1872.

SIR,—I have the honor to submit the following Report on the operations of this branch since its establishment on the 7th March last.

A few preliminary remarks, however, on the extent and general character of the territory which has lately become the property of Canada, with the management of which, designated as Dominion Lands, this branch has been charged, will prove, at the present time not uninteresting.

The extent of the territory is immense, as will appear from the following estimate of areas which has been made up from the most reliable data.

The total area is calculated within the coast lines as laid down on the admiralty charts, and is exclusive of Labrador and the islands in the Arctic sea.

The classification of productive areas is based upon the most reliable practical evidence so far attainable, that is to say: reports of official explorations, information obtained from the Hudson's Bay Company's posts, from mission stations, and from other trustworthy sources.

STATEMENT OF AREAS DOMINION LANDS.

1.	2.	3.	4.	5.
Unavailable for cultivation, being the portion of the great American Desert, which extends into British Territory.	Prairie country. The greater part of which is unsurpassed for agricultural purposes, with occasional groves, and belts of timber.	Timbered land, with occasional large prairies (as in Peace River District) adapted for growth of wheat and other cereals. Possesses abundance of timber.	Belt lying outside of No. 2 and 3, (or agricultural zone proper), in which potatoes, barley, and grasses may be successfully cultivated. Sufficiently supplied with timber.	Rock and swamp, barren lands, in which the timber growth extending up from south gradually disappears. Fur producing region.
Square miles, 50,000 In acres, 32,000,000	Square miles, 120,000 In acres, 76,800,000	Square miles, 466,225 In acres, 298,384,000	Square miles, 928,200 In acres, 594,048,000	Square miles, 642,300 In acres, 411,072,000

Shewing a total area of 2,206,725 square miles, equal to 1,412,304,000 acres, of which, saying nothing of tracts 1 & 4 above, (which are of more or less value for grazing and other producing purposes), we have 2 & 3, containing 375,184,000 acres of agricultural land, and the greater part of which is beyond question specially well adapted for wheat growing.

The winter climate is somewhat severe, but not more so than in parts of Ontario and Quebec; on the other hand, the country is undoubtedly one of the healthiest in the world, and the particular portion to which allusion has just been made, is calculated to sustain a farming population of many millions of souls.

SURVEYS.

The system of survey adopted was fixed by Order in Council on the 25th of April last, and steps were at once taken to organize and prosecute the surveys in the field with energy.

A manual of survey, setting forth the system in detail, and containing standing

instructions for the guidance of Surveyors of Dominion Lands, consisting of 32 pages, together with maps illustrating the instructions, and containing also forms of the contract to be entered into by Deputy Surveyors, was compiled and published.

A supply of Transit Theodolites of a class required for the use of surveyors who might be employed on the block surveys, and which were not attainable here, was ordered from Troughton & Sims, in London, England.

Contracts were entered into, seven in number, involving the survey into blocks of four townships each, of the whole of Manitoba, and embracing also a strip of country in addition on the east and west sides of the Province.

This survey of the Province into blocks of twelve miles square, including four townships each, with iron bar boundaries at the several angles, the number and range of the townships being stamped thereon, and with the section and quarter section corners marked on all the outlines, it will be understood is one of the features in carrying out the system of survey adopted, and is effected in all cases preliminary to the subdivision of townships into sections and quarter sections.

These contracts are those numbered from one to seven, in the schedule marked B following this report, which schedule will be found to give the names of all contract surveyors employed during the past season in Manitoba, and the number of miles run on the several contracts. In schedule C will be found the rates paid for contract work.

An accurate survey of the settled portions of the Province became necessary in order to describe the lands actually occupied, and to prepare Patents therefor under section 32 of the Manitoba Act, and the four mile strip on the Red and Assineboine Rivers, ceded to the late Earl of Selkirk by the Indians, which included these settlements, was therefore divided into surveys and apportioned as shewn by schedule D, which also exhibits the rates of compensation allowed to the gentlemen to whom the settlement surveys were entrusted, and the extent of work severally performed by them.

The number of gentlemen employed, and the extensive field included in the surveys, having rendered necessary the appointment of an inspector, you were fortunate in obtaining for this purpose the services of Lindsay Russell, Esq.

The duties of this gentleman have been arduous, not alone involving the visiting the different surveys under contract in order to see that the work is performed in all respects as called for by the manual, but also the looking after, instructing and advising with the gentlemen in charge of the several settlement surveys.

From Mr. Russell's report for the season, extracts marked E, together with schedule A, referred to by him are herewith submitted.

The contractors for the block surveys were not able, for reasons which Mr. Russell adverts to at length in his report, to accomplish the whole extent of the work severally allotted to them, and the time for such completion has therefore been extended to the ensuing season.

There is every assurance that the portion unfinished will then be entered on with energy and pushed to completion without delay.

The preliminary survey of the settled portion of the Province has been completed, and the several surveyors are now mapping their work.

It still remains on these maps being completed, to settle upon what should be deemed the exact boundary lines of the individual occupancies, and then to mark such limits finally on the ground. This will be all completed during the ensuing season.

The surveyors with whom subdivision contracts were made, were sent forward close upon the heels of the block surveyors, and having completed sixteen townships near Fort Garry, additional townships, fourteen in all, were apportioned to them lying north and north-west of Portage Laprairie, which so far seems to be the favorite locality for new settlers.

Of these latter townships *nine* were completed, and the surveys of the remainder were being prosecuted, when the weather became so severe that further operations had to be postponed.

Regarding the extent of lands at present available for settlement, it is fair to place it at the quantity as shown by Mr. Russell in schedule A, that is to say :

In subdivided townships	439,214 Acres.
In section and quarter sections marked off on outlines of blocks	717,440 Acres.
Total	1,156,654 Acres.

This, it will be understood, is entirely unconnected with the settlement surveys.

The measures you have directed to be taken with a view to the surveys of the coming season will result in the subdivision of the greater part, if not all, of the remaining townships in the Province.

I regret from the impossibility of obtaining reliable data as to the fact, not to be able to give some idea of the number of people who settled in the Province last year. It appears, however, from the notes and reports of the different surveyors that the provisions of the Order in Council of the 25th May last, authorizing on certain conditions the settling on land in advance of the surveys, has been availed of by a great number of parties, besides whom, doubtless many families were absorbed in the settlements.

It only remains for me to add a few remarks on the character of the country surveyed.

Attention is called to Mr. Russell's remarks in this particular, in addition to which my own knowledge enables me to state that the greater portion of Manitoba is excellent farming land, and as regards those portions of the Province embracing the extensive valleys of the Red and Assineboine Rivers, I never yet met with a soil so surpassingly rich.

I have the honour to be, Sir,

Your obedient servant,

J. Stoughton Dennis,
Surveyor-General.

To the Honorable J. C. Aikins,
Secretary of State of Canada.

[E.]

Extracts from Mr. Lindsay Russell's Report.

"I may add a cause of delay at the outset common to nearly all the parties. They "did not find the expected facilities in providing themselves with horses, camps and "equipage. Prices of everything were so excessively high that anyone newly entering "Manitoba could not fit himself out without more than usual time spent, even though "fruitlessly, in search and endeavour to procure what he required at rates more nearly "approaching those to which he had been accustomed."

"The surveys were most seriously retarded by the unusually prevalent and ex-"tensive fires that last summer raged throughout our own and the U.S. North Western "Prairies."

"Even before they reached any particular section their heavy smoke darkened all "the country alike and effectually prevented the surveyors from taking anything but "exceedingly short and unprofitable sights. Sometimes obliging them through the im-"possibility of seeing a Picket at all to cease work until a favorable wind would spring "up to dissipate the densely hanging fog of smoke and ashes. Their necessary astronomical "observations were frequently similarly delayed."

"These were the least of the troubles arising from the fires; when, as they eventually "did, they swept over the tracts being surveyed a certain damage to all, extreme danger "to some and actual disaster to others were the results. Two of the parties that of Mr. "Wagner, and Mr. F. H. Lynch Staunton, were completely burnt out, losing all their "provisions, tents, equipage, clothing, some of their instruments and barely escaping "with their lives. Mr. Milner Hart, though successful in saving his effects under the "like circumstances, had with his party even a narrower escape from suffocation and "burning."

"Besides the arresting of the work thus caused, time was necessarily lost in these "cases, in repairing to Fort Garry, to re-fit for its resumption."

"The disadvantage under which all lay, nearly alike after the fires passed, was the "difficulty the various parties had in keeping their horses used for transport. Very few "patches of grass remained, they were often obliged to carry hay feed long distances."

"The fires and their disastrous effects had been barely got over when there was "another interruption to the steady prosecution of the work: I allude to the Fenian "Raid."

"The difficulties and the delays set forth above, encountered by the surveyors would "not have been dwelt upon at such length did not justice to them, when judging from the "amount of their work done, require it."

"The total amount of the seasons work reckoning it by mileage of line surveyed is "to the nearest mile as follows:—

"Block Surveys	1207	miles.
"Sub-division Surveys	1406	,,
"Settlement Surveys equivalent to of above sub-division line	1200	,,
"Total.....	3813	miles."

"This amount of line surveys into farm lots shows an area of 1,535,530 acres or in "round numbers a million and a half of acres."

"The annexed schedule marked A, gives details of townships, sub-divided whole and "fractional, also of base and correction lines with their intersecting meridian exteriors "surveyed up to present time."

"As will be seen on reference to the Surveyors' returns, but a trifling portion of the "area surveyed is other than first class land."

"The swamps or marshes that are occasionally met with are nearly, if not quite, as "valuable as the drier arable land seeing that they give without the least trouble of cul-"tivation extremely rich hay meadows."

"With respect to wood for fuel, fencing, building &c., the returns of survey so far "show but a moderate portion of forest, but it is to be borne in mind that the sub-division "surveys especially have as yet been nearly altogether confined to the prairie portions of "the Province. Whilst the block surveys—*though they have reached wooded sections* "have not yet extended sufficiently over them to give full information as to the kind and "quantity of wood to be counted upon."

"The following are generally well known as the parts of the Province that will be "the principal sources of supply within its limits. Commencing at the eastward the "thickly wooded country extends from north to south across all that portion of the "Province that would be comprised between its eastern boundary and an irregular line "varying from ten to twenty miles east of the Red River. Poplar, spruce and tamarac "would be the prevalent timber in these woods; as to dimensions, it is not likely that "anywhere in this section a higher than fourteen inch average diameter of saw logs could "be got whilst much of it would not furnish even that, still though small the timber of "all kinds is unusually clean and quite large enough for lumber for ordinary purposes of "building, fencing &c."

"The next considerable body of woods is that lying above the south bank of the "Assineboine. At about twenty miles from its confluence with the Red River, the "usual narrow fringe of small woods widens out in going westward till it embraces several "miles of depth back; of wooded country of which that next the river gives timber of "comparatively larger growth, excellent oak and poplar for building of larger dimensions "than that described in the previous section."

"Mixed wood and prairie extends over the greater part of the so called Pembina "Mountain, in the west part of the Province also in the country north of the Assineboine, "Shoal Lake and Lake Manitoba."

"Fringes of wood are generally to be found along all water courses of any size and "about the shores of Lakes."

(A.)—MANITOBA LAND SURVEYS.

Schedule of Surveys made in 1871.

No.	Townships.	Line surveyed. miles	chs.	Block Lines.	Line surveyed. miles	chs.
	In 1st Range East—					
4	Townships Nos. 9, 10, 11 & 12	206	25	On 1st Correction line	110	02
	In 2nd Range East—			,, 2nd Base ,,	124	43
4	Townships Nos. 9, 10, 11 & 12	200	06	,, 2nd Correction ,,	82	41
	In 3rd Range East—			,, 3rd Base ,,	86	47
4	Townships Nos. 9, 10, 11 & 12	62	43	,, 3rd Correction ,,	57	03
	In 4th Range East—			,, 4th Base ,,	97	64
4	Townships Nos. 9, 10, 11 & 12	168	16	,, 4th Correction ,,	64	32
	In 4th Range West—			,, 5th Base ,,	21	31
Part 1	Township No. 6	22	33	,, Offsetts at Lake Manitoba	9	13
	In 5th Range West—			,, Principal Meridian	97	64
Parts 2	Townships Nos. 12 & 13	40	11	,, 1st Meridian East	63	13
	In 6th Range West—			,, 2nd ,,	67	75
2	Townships Nos. 12 & 13	114	12	,, 3rd ,,	38	57
	In 7th Range West—			,, 4th ,,	18	27
3	Townships Nos. 12, 13 & 14	138	41	,, 1st Meridian West	83	40
	In 8th Range West—			,, 2nd ,,	56	09
3	Townships Nos. 12, 13 & 14	159	72	,, 3rd ,,	35	52
	In 9th Range West—			,, 4th ,,	33	68
2	Townships Nos. 13 & part 14	57	75	,, 5th ,,	28	00
	In 10th Range West—			,, 6th ,,	12	18
Part 1	Township part 14	25	37	,, 7th ,,	18	27
30	Total miles	1,195	51	Total miles	1,207	06
	Quartering lines of these thirty Townships and parts of Townships	210	25	Mileage on Townships as opposite	1,405	76
				Six Settlement surveys, average 200 miles each	1,200	00
	Miles surveyed and posted on Township lines	1,405	76	Total mileage of surveys	3,813	02
	Area ..... 439,214 acres.			Area of sub-division surveys .... 439,214 acres.		
				Area posted on block lines ..... 717,440 ,,		
				Area of Settlement surveys ..... 378,880 ,,		
				Total area surveyed .... 1,535,534 ,,		

(B.)—SCHEDULE SHEWING CONTRACT SURVEYS.

No.	Name.	Residence.	Character.	Extent.	Completed.	Remarks.
				miles.	miles chs.	
1	Milner Hart	St. Mary's, O.	Block Survey...	315	151 44	To be finished during season of 1872.
2	A. C. Webb	Brighton, O.....	do do ...	340	187 16	do do
3	Jos. Doupe	Angus, O.	do do ...	340	98 64	do do
4	W. Beatty	Delta, O.....	do do ...	425	345 10	do do
5	B. Magrath.....	Aylmer, Q.....	do do ...	334	74 17	do do
6	John Johnston	Hull, Q.....	do do ...	303	190 39	do do
7	Lachlan Kennedy ..	Toronto, O.....	do do ...	303	159 57	do do
8	John McLatchie ...	Templeton, Q.....	Sub-division do .	233	187 43	do do
9	David Sadler.....	Dalhousie, N.B. ..	do do .	183	183 68	Accepted as completed.
10	F. H. L. Staunton .	Dundas, O.....	do do .	192	152 12	To be completed 1872.
11	Donald Sinclair	Ottawa, O.	do do .	232	222 00	Accepted as completed.
12	R. W. Hermon	Listowell, O.	do do .	288	256 18	To be completed 1872.
13	W. Wagner.....	Toronto, O.	do do .	253	241 76	Accepted as completed.
14	S. L. Brabazon	Portage du Fort, Q.	do do .	133	115 30	do do
15	Walter Beatty	Delta, O.....	do do .	85	46 69	To be completed 1872.

(C.)—SCHEDULE OF RATES.

Character of Survey.	1st Class. Open Prairie.	2nd Class. Poplar Woods.	3rd Class. Other woods,—heavy timber, Windfall, or dense bottom scrub, with Vines, or thick Willow, or Hazel.
	Per Mile.	Per Mile.	Per Mile.
Block Surveys	$9 00	$15 00	$25 00
Sub-division Block Surveys ...	7 00	11 00	18 00

For measuring and marking the section and quarter section corners on one limit of the Road allowance on a correction line, the other limit having been previously run and marked, the uniform rate of eight dollars per mile shall be paid.

It being further understood that stationary lines in traversing shores of lakes or navigable rivers, as shewn in Field Notes, shall be paid for according to the above Schedule.

(D.)—SCHEDULE SHEWING SETTLEMENT SURVEYS, &c.

Number.	Name.	Residence.	Parishes, or parts of Parishes covered by survey, and extent.		Daily rate allowed Surveyors when in field, to cover his own pay and all charges for men and cartage of supplies.	Daily allowance for himself and party to cover cost of subsistance.	Remarks.
			Locality.	Square miles.			
					$ cts.	$ cts.	
1	Duncan Sinclair.	Winnipeg, M..	St. John, Kildonan, and St. Paul	44	10 00	3 60	Preliminary survey completed.
2	G. McPhillips ..	Seaforth, O. ..	St. James, St. Charles Headingly, and St. Francois Xavier ..	100	do	do	do
3	Moses McFadden	Newry, O.....	St. Paul in Bay, Pop Point, High Bluff, and P. Portage ...	152	do	do	do
4	G. A. Doucet ...	Isle Verte, Q..	St. Andrew's, Mapleton, and St. Peter's	48	do	do	do
5	J. A. U. Baudry	Montreal, Q. .	St. Boniface, St. Vital, and St. Norbert	76	do	do	do
6	L. J. D'Auteuil.	Rimouski, Q..	St. Agathe	188	do	do	do

REPORT

OF THE

INDIAN BRANCH

OF THE

DEPARTMENT

OF THE

SECRETARY OF STATE FOR THE PROVINCES.

PRINTED BY ORDER OF PARLIAMENT.

OTTAWA:
PRINTED BY I. B. TAYLOR, 29, 31 AND 33, RIDEAU STREET.
1872.

REPORT

OF THE

INDIAN BRANCH

OF THE

DEPARTMENT

OF THE

SECRETARY OF STATE FOR THE PROVINCES.

To His Excellency the Right Honorable Lord LISGAR, *G.C.B., G.C.M.G., Governor General of Canada, &c., &c., &c.*

MAY IT PLEASE YOUR EXCELLENCY:

The acquisition of the North-West Territories, the organization of the Province of Manitoba, and the admission of British Columbia into the Dominion, widely extend the sphere of operations of the Indian Branch of this Department, and must ultimately throw upon it a great increase of labour and responsibility. Before long the general system of management, tested by the experience of the two Canadas, must be, in whole or in part, extended to those Provinces; but in the meantime my attention has been directed to such measures as appeared to press for immediate consideration and adjustment.

In anticipation of the movement of troops across the country lying between Thunder Bay and Manitoba, in 1870, agents were employed to visit the Indian Tribes along the route, to conciliate them by presents, and to assure them that while a peaceful right of way for troops and emigrants only was required, the Government would be prepared, at a convenient season, to compensate them for their friendly co-operation, and to cover by a Treaty any lands which they might be willing to part with and the Government deemed it politic to acquire.

These conciliatory measures were eminently successful, and the troops and employés of the Government passed to and fro without obstruction.

In the spring of 1871, Wemyss M. Simpson, Esq., was selected as General Indian Agent, to make Treaties with the Indian Tribes, and to represent the Government and this Department in the North-West. The Reports to, and Orders in Council, with the letters of instruction addressed to Mr. Simpson, which follow in their order, will explain

the policy of the Government, and the steps taken by the Department to carry it out, Mr. Simpson's reports of the 30th July and 3rd November, 1871, are given below, together with the Accounts and Pay Lists, from which Your Excellency can ascertain the first cost of these diplomatic arrangements, and the extent of the annual payments which they involve.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor-General in Council on the 25th April, 1871.

The Committee of Council have had under consideration the annexed Memo: dated 17th April, 1871, from the Hon. the Secretary of State for the Provinces, recommending the appointment of Wemyss McKenzie Simpson, Esq., as Indian Commissioner, and submitting certain suggestions in respect to his salary, duties, &c., and they respectfully advise, that Mr. Simpson be appointed as recommended, and that the suggestion contained in the said memorandum be approved and carried out.

Certified.

WM. H. LEE,
Clerk, Privy Council.

The Honorable
The Secretary of State
for the Provinces,
&c., &c., &c.

The Secretary of State for the Provinces calls the attention of the Privy Council to the Despatches laid from time to time before the Council from the Lieutenant-Governor of Manitoba, having reference to Treaties and arrangements with the Indians in the North-West, and to his suggestion that a Commissioner should be appointed to conduct the necessary negotiations in the Spring.

He respectfully suggests that this branch of the Public Service should be confided to Mr. Wemyss McKenzie Simpson, who should be styled Indian Commissioner, receiving his instructions from, and reporting to this Department.

That the salary of this officer, should be fixed at $2,000, with such reasonable allowance for travelling expenses as may hereafter be assigned by Order in Council.

That the Commissioner be instructed to confer, from time to time, with the Lieut.-Governor of Manitoba, who will consult and co-operate with him. Where they agree they will report jointly. Should they differ, the grounds of disagreement must be distinctly stated.

That the attention of the Commissioners be directed to the necessity of arranging with the Bands inhabiting the Tract of Country between Thunder Bay and the Stone Fort, for the cession (subject to certain reserves such as they should select) of the lands occupied by them.

The Secretary of State also suggests that as the Bands, lying along this route, conducted themselves peaceably, and offered no obstructions to the expeditionary force sent through their country last summer, the provisions promised them last year, should be sent to Fort Francis and the Lake of the Woods, early in the Spring, as an earnest of the friendly disposition of the Government,

It is also further submitted that it will add much to the usefulness of the Commissioner among the Indian Tribes, if he be allowed to wear an uniform, without which they are slow to believe that any one, having the Queen's authority, can be sent to treat with them.

JOSEPH HOWE.

17th April, 1871.

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES.

OTTAWA, 28th April, 1871.

SIR,

I have the honor to transmit to you, herewith, for the information of your Government, a copy of an Order of His Excellency the Governor-General in Council, authorizing the appointment of Mr. Wemyss McKenzie Simpson, as Indian Commissioner, to treat with the several Tribes of Indians between Thunder Bay and the Stone Fort.

Mr. Simpson's commission is being prepared, and will be sent to him at an early day.

I have, &c.,

JOSEPH HOWE,

Secretary of State.

The Honorable
A. G. Archibald,
Lieutenant-Governor,
Fort Garry.

DEPARTMENT OF THE SECRETARY OE STATE FOR THE PROVINCES.

OTTAWA, 5th May, 1871.

SIR.—I have the honor to enclose, herewith, a Commission under the Great Seal' appointing you Indian Commissioner, to conduct negotiations and make Treaties with the Indian Tribes in the North-West, with the powers and authorities specially set forth in the Commission.

Your instructions, as to your duties as Commissioner will be sent to you from time to time from this Department, and to it you will address your official reports.

Your Salary as Commissioner, has been fixed at $2,000 per annum, to commence from the date of your Commission, with such reasonable allowance for travelling expense as may hereafter be fixed by His Excellency in Council.

You will confer from time to time with the Lieut.-Governor of Manitoba, on all matters connected with your duties as Commissioner, and you will endeavour as much as possible to co-operate with him.

As soon as you have completed your labours at Fort Francis, as a Commissioner, jointly with Mr. Dawson and Mr. Pether (for with the Indians in that neighborhood it will be necessary first to deal), you will, without loss of time, proceed to Fort Garry, to confer with the Lieutenant-Governor of Manitoba, and enter upon your duties as sole Commissioner with the Indian Tribes to the West of the Province.

His Excelleney having appointed you Lieut.-Colonel of the Regimental Division of Algoma, it will be well that in your official interviews with the Indians, you should wear the uniform to which you are entitled as a Militia Officer of that rank.

I enclose a printed copy of Lieut. Butler's report of his journey from Fort Garry to Rocky Mountain House and back, as the information it contains about the Indians in the West may be useful to you in negotiating with them.

I have, &c.,

JOSEPH HOWE,

Secretary of State.

W. M. Simpson, Esq., M. P.,
Sault Ste. Marie.

OFFICE OF THE SECRETARY OF STATE FOR THE PROVINCES.

OTTAWA, 6th May, 1871.

GENTLEMEN,—I have the honor to enclose a Commission under the Great Seal, authorizing you jointly to treat with the Saulteaux and Lac Seul Indians of the Ojibbeway Nation, for the surrender of their lands to the Government.

Those lands are assumed to cover the area from the water shed of Lake Superior to the North-West Angle of the Lake of the Woods, and from the American border to the height of land from which the streams flow towards the Hudson's Bay.

One object which the Government have in view in seeking the surrender of this tract of country is to make the route now being opened from Thunder Bay to Manitoba secure for the passage of Emigrants, and of the people of the Dominion generally. They also desire to throw open to settlement any portion of the land included in this area which may be susceptible of improvement and profitable occupation.

As opinions vary very much as to the extent of arable land from which any income may be derived, the Government must depend very largely upon the exercise of your judgment in fixing the price to be given. The powers intrusted to you are large, and they should be used with constant reference to the responsibility which the Government owes to Parliament and to the country for the judicious and economical expenditure of the funds and supplies intrusted to your charge. It should therefore be your endeavor to secure the session of the lands upon terms as favorable as possible to the Government, not going as far as the maximum sum hereafter named unless it be found impossible to obtain the object for a less amount.

The number of Indians assumed to inhabit this tract of country, is estimated at about 2,500, and the maximum amount which you are authorized to give, is twelve dollars per annum for a family of five, with a discretionary power to add small sums in addition when the families exceed that number. In fixing this amount, you must not lose sight of the fact that it cannot fail to have an important bearing on the arrangements to be made subsequently with the tribes further West.

The Finance Minister will arrange with the Hudson's Bay Company, to supply you with funds to the extent of $6,000, which may be required during the progress of your negotiations.

It is desirable that you shonld be at Fort Francis not later than the middle of June, as the Indians usually assemble there about that time. In order, however, to assure a full attendance of the Indians next month, Mr. Commissioner Pether will, on receipt of this communication, send out runners to notify the Indians of the proposed meeting. Any provisions, stores or presents sent up last year for the Indians, but not expended, will be available for the purpose of your negotiations, and Mr. Commissioner Dawson is hereby authorized to arrange (with the sanction of the Minister of Public Works) to purchase and forward to Fort Francis, as early in June as possible, such additional provisions, clothes, &c., as the Commissioners may require for the purpose of their negotiations.

The chiefs' clothing and flags provi led last year, will also be at your disposal, as well as four additional suits of chiefs' clothing and flags, which Mr. Dawson will take with him.

I enclose, for your information, a copy of the surrender negotiated by Mr. Robinson in 1850, of the Indian Lands round Lake Superior, assumed to be rich in minerals, and extending to the height of land which separates the tract conceded from the Territory of the Hudson's Bay Company.

I may mention that I am informed that in the old Provinces of Quebec and Ontario, the highest price paid for the finest lands has seldom, if ever, exceeded four dollars per head per annum, to the Band with which the treaty was made.

Another point to which I wish to call your attention is the policy of restricting as much as possible the amount to be paid in money. It has been represented to the Government that money is but little used by the Band with whom you will negotiate,

and that provisions and clothing are much more highly prized. There is a danger too that, should money become plentiful among those people, traders will bring spirits into the settlement, and demoralize and destroy the Indians.

One part of your duty, and by no means the least important, will be to select desirable reserves for the use of the Indians themselves, with a view to the gradual introduction of those agencies which in Canada have operated so beneficially in promoting settlement and civilization among the Indians.

In accordance with the suggestions of Mr. Commissioner Simpson, the Minister of Public Works has been authorized to erect a house and a store at Fort Francis, on such site and of such dimensions as you may think necessary for the shelter and protection of the supplies sent there, and for other purposes connected with your mission.

It is very desirable that the Lieut.-Governor of Manitoba should be kept advised from time to time of your movements as he may possibly think it advisable to meet the Commissioners at Fort Francis, and to lend you the aid of his counsel and co-operation.

You will be good enough to report to this Department at least once a month, and always advise me where return letters are most likely to reach you.

Identical letters are sent to each of the Commissioners in order that each may have timely notice of his appointment, and be able to make such preliminary arrangements as may be necessary before the meeting.

The Commission and draft treaty referred to in the letter, are sent under cover to Mr. Simpson, as being the person first named in the Commission.

I have, &c.,
JOSEPH HOWE,
Secretary of State for the Provinces.

W. M. Simpson, Esq.,
S. J. Dawson, Esq.,
Robert Pether, Esq.,

OFFICE OF THE SECRETARY OF STATE FOR THE PROVINCES.

OTTAWA, 6th May, 1871.

SIR,—Referring to the Order in Council of the 26th ultimo (of which I am advised a copy has been furnished you), respecting the appointment of Commissioners to treat next month with the Indians at Rainy Lake, may I suggest you to have the goodness to give Mr. S. J. Dawson, of your Department (being one of the Commissioners above referred to), authority to arrange for the purchase, &c., of such provisions, clothing, &c., as are authorized by the said Order in Council, and as the Commissioners may require during their negotiations with the Indians. May I also request that you will give Mr. Dawson authority to see to the early construction at Fort Francis, of the small House or store authorized by the Order in Council.

This Department will of course be prepared to direct the payment of the amount expended by Mr. Dawson in the purchase of provisions, clothing, and in the construction of the store.

I have the honor to be, Sir,
Your most obedient servant,
JOSEPH HOWE,
Secretary of State for the Provinces.

The Honorable
H. L. Langevin, C. B.,
Minister of Public Works.

OFFICE OF THE SECRETARY OF STATE FOR THE PROVINCES.

OTTAWA, 9th May, 1871.

SIR,—I have the honor to enclose, herewith, for your information, a copy of a letter addressed by me to Mr. W. M. Simpson, M.P., together with a copy of a letter addressed to that gentleman, and Messrs. S. J. Dawson and Pether. The former contains the instructions given to Mr. Simpson, as "Indian Commissioner," and the latter contains the instructions given to that gentleman and the two others above named as Joint Indian Commissioners for certain purposes. I also enclose a copy of a Report of Mr. S. J. Dawson (one of the above named Commissioners) on the subject of the Saulteaux and Lac Seul Indians. The Report is interesting for the information it affords respecting the particular Band of Indians with whom the Joint Commissioners have to deal.

The accompanying letters sufficiently explain the scope of the Commissions and the powers and duties of the Commissioners. They also indicate the position and duties of the Commissioners with reference to you as Lieutenant-Governor of Manitoba. His Excellency feels satisfied that you will in every way in your power give the Commissioners the benefit of your counsel and support in conducting the important and difficult negotiations intrusted to their management by the Government.

I have the honor to be, Sir,
Your most obedient servant,
JOSEPH HOWE,
Secretary of State for the Provinces.

The Honorable
A. G. Archibald,
Lieutenant-Governor, Fort Garry.

SAULT ST. MARIE,
6th June, 1871.

SIR,—I have the honor to acknowledge receipt of your favor of 17th May, and also a package containing 4 flags for distribution among the Indians of the Red River Territory.

Mr. S. J. Dawson passed this to-day for Fort William, and handed me my Commission. I shall leave by the steamer *Chicora* on Friday, and hope to find Mr. Dawson ready to accompany me to Fort Francis. I sent word to Mr. Pether to assemble the Indians about the 25th instant.

Would you kindly send my pay for last year to my wife, having the cheque cashed into small bills and remitted by mail registered.

I have the honor to be, Sir,
Your most obedient servant,
WEMYSS M. SIMPSON.

The Hon. Joseph Howe,
Secretary of State for the Provinces.
Indian Branch,
Ottawa.

GOVERNMENT HOUSE,
SILVER HEIGHTS, May 28th, 1871.

SIR,—I have the honor to acknowledge the receipt of your despatch No. 262, under date of the 9th instant, enclosing copy of a letter addressed to Wemyss M. Simpson, M.P., together with a copy of a letter addressed to that gentleman and Messrs. S. J. Dawson and Pether; also of a report of Mr. S. J. Dawson on the subject of the Saulteaux and Lac Seul Indians.

His Excellency the Governor General may rest assured that I shall, in every way in my power aid the Commissioners in conducting the important and difficult negotiations intrusted to their management.

I had previously received, enclosed in an envelope addressed to me by Mr. Meredith, a letter for Mr. Pether, which I have forwarded to that gentleman by an Indian of the neighborhood of Fort Francis, who is returning to his home.

Yesterday the messenger, whom I had sent to the Lake of the Woods Indians, with letters informing them of the intentions of the Government as to the treaty with them, and warning them not to come here, returned bringing me a report that the Indians were gratified to receive the letters, and would await patiently the arrival of the Commissioners.

I have the honor to be, Sir,

Your most obedient servant,

ADAMS G. ARCHIBALD.

The Honorable

The Secretary of State

for the Provinces,

Ottawa.

FORT FRANCIS,

11th July, 1871.

SIR,—We have the honor to inform you that we have had repeated interviews with the Saulteaux tribe of the Ojibbeway Indians, at Shebandowan Lake, and at this place.

The Indians, in anticipation of negotiations being entered into with them, had collected in larger numbers than usual, and we had, in consequence, a favorable opportunity of explaining the intentions of the Government as to obtaining a surrender of their Territorial rights. They preferred claims in regard to promises which had heretofore been made to them, for "right of way" through their country. These we admitted to a limited extent, and have made them presents in provisions and clothing; we are also to pay them a small amount in money, and it is fully and distinctly understood, by the Indians, that these presents and payments are accepted by them as an equivalent for all past claims whatever.

The Government is thus, at the present moment, clear of any Indian claim for the past, in the section of country intervening between the Height of Land and the Lake of the Woods.

A deputation of Indians from Lac Seul has also met us here, and through it, we have informed the Indians of that section that they will be parties to the treaties to be entered into, and partake in their advantages.

Various causes have prevented us from entering into a formal and permanent arrangement with the Indians at present.

In the first place, it was necessary that they should be afforded time in which to deliberate calmly on the various points to be embraced in a Treaty; and, in order that they might be informed as to what would be expected of them, we have explained to them fully the views of the Government, stating that they would be called upon to surrender their Territorial rights; that reserves of land would be set aside for them, and annual payments made.

In the next place, a disease very like scarlatina had broken out among those of them who had assembled here, and there was an immediate necessity for their separating, which they have already to some extent done, to prevent the spread of the disease. Three deaths

occurred among them to-day, and in all, eleven persons, chiefly children, have been carried off since our arrival, and there are many more in a precarious state.

We have much satisfaction in saying that the result of our interviews has been, in many respects, satisfactory.

The Indians fully comprehend the altered position in which they are placed by the opening of the communication, and evinced an earnest desire to meet the views of the Government, and we have parted with them with the understanding that we are to meet them early next summer, and that we are then to come provided with presents, and prepared to make such payments as may be determined on.

In the meantime, they are to consider calmly the proposals which have been made to them, and are to be prepared, when we meet again, to point out the land which they desire as reserves, and explain the various matters which they wish to be provided for; while we, on our part, have engaged to point out to the Government the wants of the Indians.

We have much pleasure in saying that the Indians have evinced a most friendly disposition, and look upon the emigrants and others now passing through their country, not only without distrust, but with evident satisfaction, and we have no doubt but that, by careful and prudent management, these friendly relations may be permanently maintained.

We have at present no time to enter into details, but will soon submit a report with statements of the expenditure so far incurred, and suggestions as to future negotiations with the Indians.

We have the honor to be, Sir,
Your most obedient Servants,
WEMYSS M. SIMPSON,
S. J. DAWSON,
ROBERT PETHER,
Commissioners.

The Honorable
JOSEPH HOWE.
Secretary of State for the
Provinces, Ottawa.

GOVERNMENT HOUSE,

SILVER HEIGHTS, July 19th, 1871.

SIR,—I have great pleasure in communicating to you, for the information of His Excellency the Governor General, the arrival at this place of Mr. Simpson, the Indian Commissioner, which occurred on the evening of Sunday, the 16th instant.

You will recollect that in my despatches, numbers 4 and 5, under dates respectively of the 17th and 21st September last, I reported certain interviews with the Indians at the mission below the Stone Fort.

At these interviews I informed the Indians I was not then prepared to enter upon negotiations for a Treaty with them, that I wished them to disperse to their hunting grounds, and, when the spring opened, I should appoint a time and send them word to meet me in the neighborhood of the Stone Fort; that I should then be prepared, either in person, or by some representative of the Queen directly from Canada, to enter upon negotiations with them, and that I had no doubt a satisfactory arrangement would be made.

On this they were induced to disperse, but as soon as the spring opened they became anxious about the Treaty. They have sent repeated messages enquiring when the Treaty was to come off, and appeared very much disappointed at the delay. They have interfered with emigrants, warning them not to come on the ground outside the Hudson's Bay Company's surveys, and lately they have posted up a written notice on the door of the church at Portage La Prairie, warning parties not to intrude on their lands until a Treaty should be made.

With this anxiety and uneasiness among the Indians, with a feeling of danger on the part of emigrants seeking lands and ready to commence work, but subjected to enforced idleness by the danger of entering against the will of the Indians, you will easily understand that I awaited with much anxiety and hailed with much pleasure the arrival of Mr. Simpson.

Mr. Dawson, who was associated with Mr. Simpson and Mr. Pether, in the Commission respecting the Indians on the Lakes of the interior, arrived with Mr. Simpson.

On Monday I asked both these gentlemen, and also Mr. James McKay, to meet with me and talk over the whole matter, in the light of the experience acquired at Rainy River, and of what had been learned of the Indians here.

We were all of opinion that it would be desirable to procure the extinction of the Indian title, not only to the lands included within the Province, but also to so much of the timber grounds east and north of the Province, as were required for immediate entry and use, and also of a large tract of cultivable ground, west of the Portage, which, having very few Indian inhabitants, might be conceded with very little additional cost.

The whole of this ground is occupied principally by one nation, the Chippawas, of whom the Saulteaux of the lakes are a branch, and in some respects, it would have been well to conduct the negotiation for the whole at one time and place, but there are several practical difficulties in the way.

Such a course would have involved much delay, before anything definite could have been effected. Immigrants would have been kept waiting for such a period as would have prevented their being able to get on to the lands they may select in time to be housed for the winter, and to make the preparations necessary for beginning farming operations next spring.

We should also have been obliged to feed, from this time till the negotiations were completed, the whole body of the neighborhood, who would crowd in before the others could be collected, and we should have had them longer on our hands and find it more difficult to disperse them when the work was done.

Besides all this, we had led the Indians to believe that they would be treated within their different localities just as their lands were required, and it is exceedingly desirable (with these people) to keep a promise even in matters where a deviation would imply no breach of faith.

We therefore purpose to open negotiations at the Lower Fort with the Indians of the Province, and certain adjacent timber Districts, on Tuesday the 25th instant, and with the Indians of the other Districts at Manitoba Post, a Hudson's Bay Fort, at the North End of Lake Manitoba, on Thursday, the 17th August.

I send you copies of the notices forwarded to the Indians of these respective Districts.

Mr. Simpson has shewn me your despatch to S. J. Dawson, Esquire, No. 298, under date of the 22nd of May last, in which you say that the Minister of Finance had that day been requested to furnish the Commissioners with authority to draw on the Treasurer of Manitoba to the extent of $6,000, for the money required for the negotiations at Fort Francis.

I have, &c.,

ADAMS G. ARCHIBALD.

The Honorable
The Secretary of State for the Provinces,
Ottawa.

Land proposed to be included in the Indian Treaty.

Beginning on the boundary line of the United States, at a point due south from the centre of White Mouth Lake, thence to run due north to such centre, thence by the centre of the Lake and the White Mouth River, to the centre of Winnipeg River, thence by the centre of the River to its mouth, then by the east coast of Lake Winnipeg, as far North as Behring's River, thence across the lake to the mouth of the Little Saskatchewan,

and the north coast of St. Martin's Lake, and thence to Manitoba Lake. Thence by the N. E. coast of Manitoba Lake and the Waterhen River, to the Winnepegosis Lake, thence by the east coast of the Winnepegosis to a part opposite Salt Maker's Village. Thence in a line to the sources of the Shell River, to include the Duck Mountain Country. Thence by the Shell River to its junction with the Assiniboine. Thence by a line due south to the U. S. Boundary, thence easterly by the boundary line to the place of beginning.

PROCLAMATION.

The Indians of Pembina, of Roseau Lake, of White Mouth Lake and White Mouth River, and of the south shore of Lake Winnipeg, and the Indians of Portages La Prairie and White Mud River, and Bak Point, Manitoba, and all other Indians within the limits of the Province of Manitoba, are hereby, invited to meet the Commissioner of Her Most Gracious Majesty The Queen, at the Stone Fort on the Red River, on Tuesday the 25th day of July instant, at 11 o'clock of the forenoon, to enter into negotiations on the subject of an Indian Treaty.

God Save the Queen.

WEMYSS M. SIMPSON,
Indian Commissioner.

Winnipeg, July 18th, 1871.

PROCLAMATION.

The Indians of Lake Winnipeg, between the southern end of the lake and Behring's River; the Indians of the Little Saskatchewan and Partridge Cross of Fairford; the Indians of Lake Manitoba further north and west than Bak Point, including the Swan Creek Indians; the Indians inhabiting the country between Lake Manitoba and the Assiniboine, including the Indians of Riding Mountain and Duck Mountain, of Shell River and Beaver Creek, and of the Assiniboine; and all the Chippawa British Indians, inhabiting the country between the Assiniboine and the United States Frontier, extending from the west line of the Province and including the Turtle Mountain, are invited to meet the Commissioner of Her Most Gracious Majesty The Queen, at the Hudson's Bay Company's Fort, on Lake Manitoba, known as the Manitoba Post, on Tuesday the 17th day of August next, at 10 o'clock of the forenoon, to negotiate an Indian Treaty.

God Save the Queen.

WEMYSS M. SIMPSON,
Commissioner.

Fort Garry,
July 18th, 1871.

GOVERNMENT HOUSE,

SILVER HEIGHTS, July 22nd, 1871.

SIR,—I have the honor to enclose you copy of a proclamation I have caused to be issued, with a view to prevent the danger arising from intoxicating drinks being given to the Indians, on the occasion of the meeting to negotiate a treaty.

I look upon the proceedings, we are now initiating, as important in their bearing upon our relations to the Indians of the whole continent. In fact, the terms we now agree upon will probably shape the arrangements we shall have to make with all the Indians

between the Red River and the Rocky Mountains. It will therefore be well to neglect nothing that is within our power to enable us to start fairly with the negotiations.

With that view, I have, amongst other things, asked Major Irvine to detail a few of his troops to be present at the opening of the Treaty. Military display has always a great effect on savages, and the presence, even of a few troops, will have a good tendency.

I fear we shall have to incur a considerable expenditure for presents of food, etc., during the negotiations, but any cost for that purpose I shall deem a matter of minor consequence. The real burden to be considered is that which has to be borne in each recurring year.

I doubt if it will be found practicable to make arrangements upon so favorable a basis as that prescribed by his Excellency the Governor General, as the maximum to be allowed, in case of a treaty with the Lake Indians.

Nor indeed would it be right, if we look to what we receive, to measure the benefits we derive from coming into possession of the magnificent territory we are appropriating here, by what would be fair to allow for the rocks and swamps and muskegs of the Lake country east of this Province.

But to this subject I shall probably take occasion to call your attention at an early day.

I have, &c.,

ADAMS G. ARCHIBALD.

The Honorable,
The Secretary of State
for the Provinces,
Ottawa.

PROCLAMATION.

PROVINCE OF MANITOBA.

Victoria, by the Grace of God, of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith, &c., &c., &c.

ADAMS G. ARCHIBALD.

To all whom it may concern,

Greeting.

Whereas, Wemyss M. Simpson, Esquire, a Commissioner duly accredited by us to negotiate a Treaty between us and our loyal subjects, the Chippewas, Saulteaux, and other Indian tribes of Manitoba and the North-West Territories, has invited certain of our Indian subjects to meet him for that purpose at the Stone Fort, on Tuesday, the 25th day of July instant; and whereas, it is our intention that the said meeting shall be continued from day to day, till such negotiations are terminated; and, whereas, we are desirous to protect, not only our said Indian subjects, but also the population of this Province from the terrible evils and mischief which would ensue, if intoxicating liquors were allowed to be used by the Indians on the occasion aforesaid: Now we do strictly forbid and prohibit any person or persons whatever, during the continuance of the negotiations aforesaid, to sell or give to any Indian, or to any person for any Indian, in the neighbourhood of the Stone Fort, during the continuance of the said negotiations, any intoxicating liquors whatever; and we also make known that any offender against the law, shall be punished with the utmost rigor of the law; and we enjoin all our Magistrates, Peace Officers, and Policemen, to keep strict watch over, and forthwith to bring to justice, any person who shall be found violating the law, or disregarding this Proclamation.

In testimony whereof, we have these our Letters to be made Patent, and the Great Seal of Manitoba to be hereunto affixed.

Witness our trusty and well-beloved, the Honorable Adams George Archibald, Lieutenant Governor of our Province of Manitoba, Member of our Privy Council for Canada, &c., &c., &c., at our Government House, at Silver Heights, this 21st day of July, one thousand eight hundred and seventy-one, and in the thirty-fifth year of our reign.

THOMAS HOWARD,
Provincial Secretary.

By Command.
Winnipeg, July 23rd, 1871.

LOWER FORT GARRY,

July 29th, 1871.

SIR,—I have the honor to inform you that on Monday last I came to this Fort with the Commissioner to meet the Indians called here, with a view to negotiate a Treaty, intending to open the business on Tuesday morning.

It appeared, however on enquiry, that some bands of Indians had not arrived on Tuesday morning, and we were therefore obliged to postpone the opening of the meeting till Thursday. On that day the Indians from all the sections of the country to which the invitation extended were found present to the number of about one thousand. A considerable body of half-breeds and other inhabitants of the country were also present, awaiting with some anxiety to learn what should be announced as the policy of the Government.

I enclose you a memorandum of the observations with which I opened the meeting. On reading them you will observe one or two points which may require some explanation.

At the time of the Treaty with the Earl of Selkirk, certain Indians signed as chiefs and representatives of their people. Some of the Indians now deny that these men ever were chiefs or had authority to sign the Treaty.

With a view therefore to avoid a recurrence of any such question, we asked the Indians, as a first step, to agree among themselves in selecting their Chiefs, and then to present them to us and have their names and authority recorded.

Furthermore, the Indians seem to have false ideas of the meaning of a Reserve. They have been led to suppose that large tracts of ground were to be set aside for them as hunting grounds, including timber lands, of which they might sell the wood as if they were proprietors of the soil.

I wished to correct this idea at the outset.

Mr. Simpson followed me with some observations in the same strain, after which the Indians retired to select their Chiefs and spokesmen.

On Friday morning, the Chiefs and spokesmen were duly presented, and after their names were recorded, the Indians were invited to express their views.

After some delay they stated that there was a cloud before them which made things dark, and they did not wish to commence the proceedings till the cloud was dispersed.

On enquiring into their meaning, I found that they were referring to some four of their number who were prisoners in gaol. It seems that some Swampy Indians had entered into a contract with the Hudson's Bay Company as boatmen, and had deserted, and had been brought up before Magistrates under a local law of last session, and fined, and, in default of payment sent to prison, for forty days.

Of this term some considerable part had expired. A few of the offenders had paid their fines, but there were still four Indians remaining in prison.

On learning the facts I told the Indians that I could not listen to them if they made a demand for the release of the Indians as a matter of right, that every subject of the Queen, whether Indian, half-breed or white, was equal in the eye of the law; that every

offender against the law must be punished whatever race he belonged to; but I said that on the opening of negotiations with them the Queen would like to see all her Indians taking part in them, and if the whole body present were to ask as a matter of grace and favor, under the circumstances, that their brethren should be released, Her Majesty would be willing to consent to their discharge; she would grant as a favour what she must refuse if asked for on any other ground. They replied by saying that they begged it as a matter of favour only. Thereupon I acceded to their request, and directed the discharge of the four Indians. This was received with great satisfaction. I explained again, that there might be no misunderstanding about it, that henceforth every offender against the law must be punished. They all expressed their acquiescence in what I said. The discharge of the prisoners had an excellent effect.

Next morning the Indians, through one of their spokesmen, declared in presence of the whole body assembled, that from this time they would never raise their voice against the law being enforced. After the order of the release, the Chiefs and spokesmen addressed us, questions were asked and answered, and some progress made in the negotiations. Eventually the meeting adjourned till this morning at ten o'clock

A general acquiescence in the views laid down by Mr. Simpson and myself was expressed, but it was quite clear by the proceedings of to-day, that our views were imperfectly apprehended. When we met this morning, the Indians were invited to state their wishes as to the Reserves, they were to say how much they thought would be sufficient, and whether they wished them all in one or in several places.

In defining the limits of their reserves, so far as we could see, they wished to have about two-thirds of the Province. We heard them out, and then told them it was quite clear that they had entirely misunderstood the meaning and intention of Reserves. We explained the object of these in something like the language of the Memorandum enclosed, and then told them it was of no use for them to entertain any such ideas, which were entirely out of the question. We told them that whether they wished it or not, immigrants would come in and fill up the country; that every year from this one twice as many in number as their whole people there assembled, would pour into the Province, and in a little while would spread all over it, and that now was the time for them to come to an arrangement that would secure homes and annuities for themselves and their children.

We told them that what we proposed to allow them, was an extent of one hundred and sixty acres for each family of five, or in that proportion; that they might have their land where they chose, not interfering with existing occupants; that we should allow an annuity of twelve dollars for every family of five, or in that proportion per head. We requested them to think over these propositions till Monday morning.

If they thought it better to have no Treaty at all, they might do without one, but they must make up their minds; if there was to be a Treaty, it must be on a basis like that offered.

That under some such arrangements, the Indians in the east were living happy and contented, enjoying themselves, drawing their annuities, and satisfied with their position.

The observations seemed to command the acquiescence of the majority, and on Monday morning, we hope to meet them in a better frame for the disscussion and settlement of the Treaty.

I have, &c.,

ADAMS G. ARCHIBALD.

The Honorable
The Secretary of State
for the Provinces.

Memorandum of an Address to the Indians by the Lieut.-Governor of Manitoba.

On the 13th September last, on my first arrival in the country, I met a number of you at the mission, I told you I could not then negotiate a Treaty with the Indians, but that I was charged by your Great Mother the Queen, to tell you that she had been very glad to see that you had acted during the troubles like good and true children of your Great Mother. I told you also that as soon as possible you would all be called together to consider the terms of a Treaty to be entered into between you and your Great Mother.

I advised you to disperse to your homes, and gave you some ammunition to enable you to gain a livelihood during the winter by hunting.

I promised that in the Spring you would be sent for, and that either I, or some person directly appointed to represent your Great Mother, should be here to meet you, and notice would be given you when to convene at this place to talk over what was right to be done.

Early in the Spring, Mr. Simpson, who sits beside me, was made Commissioner. He left his home at once for this Province, by Rainy Lake and the Lake of the Woods.

The Indians of the Lake Districts meet, as you know, on Rainy River yearly, about the 20th June, to fish for sturgeon, and they could not be called together sooner.

Mr. Simpson met them these at that time, and talked over their affairs with them, and made certain arrangements with them. He then hurried on to see you, and reached this Province a week ago last Sunday. He then sent messengers at once to all the Indians within certain bounds, asking them to meet him here on the 25th day of July. Some of you were unable to come so soon, and he has therefore, at the instance of those who were here, waited till to-day to open the talk. I believe that now you are all arrived, and ready to proceed to business.

It will be the duty of the Commissioner to talk to you on the particular details of the Treaty, and I will give place to him presently, but there are one or two things of a general kind which I would like, before I close, to bring to your notice, for you to think about among yourselves.

First. Your Great Mother, the Queen, wishes to do justice to all her children alike. She will deal fairly with those of the setting sun, just as she would with those of the rising sun. She wishes order and peace to reign through all her country, and while her arm is strong to punish the wicked man, her hand is also open to reward the good man every where in her Dominions.

Your Great Mother wishes the good of all races under her sway. She wishes her red children to be happy and contented. She wishes them to live in comfort. She would like them to adopt the habits of the whites, to till land and raise food, and store it up against a time of want. She thinks this would be the best thing for her red children to do, that it would make them safer from famine and distress, and make their homes more comfortable.

But the Queen, though she may think it good for you to adopt civilized habits, has no idea of compelling you to do so. This she leaves to your choice, and you need not live like the white man unless you can be persuaded to do so with your own free will. Many of you, however, are already doing this.

I drove yesterday through the village below this Fort. There I saw many well built houses, and many well tilled fields with wheat and barley and potatoes growing, and giving promise of plenty for the winter to come. The people who till these fields and live in these houses are men of your own race, and they shew that you can live and prosper and provide like the white man.

What I saw in my drive is enough to prove that even if there was not a buffalo or a fur bearing animal in the country, you could live and be surrounded with comfort by what you can raise from the soil.

Your Great Mother, therefore, will lay aside for you "Lots" of land to be used by you and your children forever. She will not allow the white man to intrude upon these Lots. She will make rules to keep them for you, so that, as long as the sun shall shine,

there shall be no Indian who has not a place that he can call his home, where he can go and pitch his camp, or if he chooses, build his house and till his land.

These reserves will be large enough, but you must not expect them to be larger than will be enough to give a farm to each family, where farms shall be required. They will enable you to earn a living should the chase fail, and should you choose to get your living by tilling, you must not expect to have included in your reserve more of hay grounds than will be reasonably sufficient for your purposes in case you adopt the habits of farmers. The old settlers and the settlers that are coming in, must be dealt with on the principles of fairness and justice as well as yourselves. Your Great Mother knows no difference between any of her people. Another thing I want you to think over is this : in laying aside these reserves, and in everything else that the Queen shall do for you, you must understand that she can do for you no more than she has done for her red children in the East. If she were to do more for you, that would be unjust for them She will not do less for you because you are all her children alike, and she must treat you all alike.

When you have made your Treaty you will still be free to hunt over much of the land included in the Treaty. Much of it is rocky and unfit for cultivation, much of it that is wooded is beyond the places where the white man will require to go, at all events for some time to come. Till these lands are needed for use you will be free to hunt over them, and make all the use of them which you have made in the past. But when lands are needed to be tilled or occupied, you must not go on them any more. There will still be plenty of land that is neither tilled nor occupied where you can go and roam and hunt as you have always done, and, if you wish to farm, you will go to your own reserve where you will find a place ready for you to live on and cultivate.

There is another thing I have to say to you. Your Great Mother cannot come here hersef to talk with you, but she has sent a messenger who has her confidence.

Mr. Simpson will tell you truly all her wishes. As the Queen has made her choice of a Chief to represent her, you must, on your part, point out to us the Chiefs you wish to represent you, as the persons you have faith in.

Mr. Simpson cannot talk to all your braves and people, but when he talks to Chiefs who have your confidence he is talking to you all, and when he hears the voice of one of your Chiefs whom you name he will hear the voice of you all. It is for you to say who shall talk for you, and also who shall be your chief men. Let them be good Indians, who know your wishes and whom you have faith in.

You will look to the Commissioner to fulfil everything he agrees to do, and the Queen will look to the Chiefs you neme to us, to see that you keep your parts of the agreement.

It is our wish to deal with you fairly and frankly.

If you have any question to ask, ask them, if you have anything you wish the Queen to know, speak out plainly.

Now Chiefs and braves and people, I introduce to you Mr. Simpson, who will say anything he thinks fit in addition to what I have said.

When you hear his voice you are listening to your Great Mother the Queen, whom God bless and preserve long to reign over us.

LOWER FORT GARRY

MANITOBA, July 30th, 1871.

SIR,—I have the honor to inform you for the information of His Excellency the Governor General that I arrived in this Province on the 16th instant, and, after consultation with the Lieutenant-Governor of Manitoba, determined upon summoning the Indians of this part of the country to a conference for the purpose of negotiating a Treaty at Lower

Fort Garry, on Tuesday the 25th instant, leaving for a future date the negotiation with the Indians westward of and outside of the Province of Manitoba.

Proclamations were issued and every means taken to insure the attendance of the Indians, and on Monday, the 24th instant, I proceeded to Lower Fort Garry, where I met His Excellency the Lieutenant Governor.

On Tuesday, finding that only a small portion of the Indians had arrived, we held a preliminary conference with Henry Prince—the Chief of the Swampies and Chippewas residing on what is known as the Indian Reserve, between Lower Fort Garry and Lake Winnipeg—at which we arranged a meeting for the next day at 12 o'clock, for the purpose of ascertaining the names of the Chiefs and head men of the several tribes. At this preliminary conference, Henry Prince said that he could not then enter upon any negotiations as he was not empowered to speak or act for those bands of Indians not then present.

In the mean time it was found necessary to feed the Indians assembled here, and accordingly provisions were purchased and rations served out.

On Wednesday the 26th, His Excellency the Lieutenant Governor and myself met those Indians who had arrived, in Council, and addressed them with the view of explaining the purport of my Commission, and the matters which were to form the subject of a Treaty.

It having been reported that the Indians who had not then arrived were on their road here, we agreed that another meeting should take place on the following day, at which the Chiefs and head men were to be presented to us.

On Thursday, pursuant to appointment, we again met the Indians, when the Chiefs and head men of the several bands present were named and presented. I then explained to them the nature of Indian Reserves, and desired them to determine, in Council among themselves, the locality in which they desired their reserves to be laid out.

On Friday, the 28th, we again met the Indians, but they were not then prepared to state their demands, and another meeting was appointed for Saturday.

On Saturday, the 29th, we again met them, all having by this time arrived. When the subject of Reserves came up, it was found that the Indians had misunderstood the object of these Reservations, for their demands in this respect were utterly out of the question. After a prolonged discussion with them, I consulted with the Lieutenant Governor, and determined to let them at once understand the terms that I was prepared to offer, and I pointed out that the terms offered were those which would receive Her Majesty's consent. On further explanation of the subject, the Indians appeared to be satisfied, and willing to acquiesce in our arrangements as hereinafter mentioned, and having given them diagrams showing the size of the Lots they would individually become possessed of, and having informed them of the amount of their annuity, it was finally settled that they should meet on Monday, the 31st, and acquaint me with their decision.

The Reserves will compromise sufficient land to give each family of five persons one hundred and sixty acres, or in like proportion, together with an annual payment in perpetuity of Twelve Dollars for each family of five persons, or in like proportion.

As far as I can judge, I am inclined to think that the Indians will accept these terms.

I am happy to be able to say that the precautions taken to prevent the introduction of liquor amongst the Indians have been wholly successful, and that perfect order and contentment have prevailed up to the present time.

I have, &c.,

WEMYSS M. SIMPSON,

Indian Commissioner.

The Honorable

The Secretary of State

for the Provinces,

Ottawa.

(COPY.)

ARTICLES OF A TREATY, made and concluded this third day of August, in the year of Our Lord one thousand eight hundred and seventy-one, between HER MOST GRACIOUS MAJESTY THE QUEEN *of Great Britain and Ireland, by Her Commissioner* WEMYSS M. SIMPSON, *Esquire, of the one part, and the* CHIPPEWA *and* SWAMPY CREE *Tribes of Indians, inhabitants of the Country within the limits hereinafter defined and described by their Chiefs, chosen and named as hereinafter mentioned, of the other part :*

WHEREAS, all the Indians inhabiting the said County, have, pursuant to an appointment made by the said Commissioner, been convened at a meeting at the Stone Fort, otherwise called Lower Fort Garry, to deliberate upon certain matters of interest to Her Most Gracious Majesty, of the one part, and to the said Indians of the other; And Whereas, the said Indians have been notified and informed by Her Majesty's said Commissioner, that it is the desire of Her Majesty to open up to settlement and Immigration a Tract of Country bounded and described as hereinafter mentioned, and to obtain the consent thereto of Her Indian subjects inhabiting the said tract, and to make a Treaty and arrangements with them, so that there may be peace and good will between them and Her Majesty, and that they may know and be assured of what allowance they are to count upon and receive, year by year, from Her Majesty's bounty and benevolence

AND WHEREAS the Indians of the said tract, duly convened in Council as aforesaid, and being requested by Her Majesty's said Commissioner to name certain Chiefs and Head-men, who shou'd be authorized on their behalf to conduct such negotiations, and sign any Treaty to be founded thereon, and to become responsible to Her Majesty for the faithful performance by their respective Bands of such obligations as should be assumed by them, the said Indians have thereupon named the following persons for that purpose, that is to say: Mis-Koo-Kenew, or Red Eagle, (Henry Prince); Ka-Ke-Ka-penais, or Bird for ever; Na-sha-Ke-penais, or Flying down Bird; Na-na-wa-nanan, or Centre of Bird's tail; Ke-we-tayash, or Flying round; Wa-ko-wush, or Whip-poor-Will, Oo-za-we-Kwun, or Yellow Quill; and thereupon, in open Council, the different Bands have presented their respective Chief to His Excellency the Lieutenant Governor of the Province of Manitoba, and of the North-West Territory, being present at such Council, and to the said Commissioner, as the Chief and Head-Men for the purposes aforesaid, of the respective Bands of Indians inhabiting the said District, hereinafter described; and whereas the said Lieutenant Governor and the said Commissioner, then and there received and acknowleged the persons so presented as Chiefs and Head-Men, for the purpose aforesaid; And whereas the said Commissioner has proceeded to negotiate a Treaty with the said Indians, and the same has finally been agreed upon and concluded as follows, that is to say:

The Chippewa and Swampy Cree Tribes of Indians, and all other the Indians inhabiting the District hereinafter described and defined, do hereby cede, release, surrender, and yield up to Her Majesty the Queen, and Successors for ever, all the lands included within the following limits, that is to say: Beginning at the International boundary line near its junction with the Lake of the Woods, at a point due north from the centre of Roseau Lake, thence to run due north to the centre of Roseau Lake; thence northward, to the centre of White Mouth Lake, otherwise called White Mud Lake; thence by the middle of the Lake and the middle of the river issuing therefrom, to the

mouth thereot in Winnipeg River; thence by the Winnipeg River to its mouth; thence westwardly, including all the Islands near the south end of the Lake, across the Lake to the mouth of the Drunken River; thence westwardly, to a point on Lake Manitoba, half way between Oak Point and the mouth of Swan Creek; thence across Lake Manitoba, on a line due west to its western shore; thence in a straight line to the crossing of the Rapids on the Assiniboine; thence due south to the International Boundary Line, and thence eastwardly by the said line to the place of beginning; to have and to hold the same to Her said Majesty the Queen, and Her Successors for ever; and Her Majesty the Queen, hereby agrees and undertakes to lay aside and reserve for the sole and exclusive use of the Indians the following tracts of land, that is to say:—For the use of the Indians belonging to the band of which Henry Prince, otherwise called Mis-Koo-Kenew, is the Chief, so much of land on both sides of the Red River, beginning at the south line of St. Peter's Parish, as will furnish one hundred and sixty acres for each family of five, or in that proportion for larger or smaller families; and for the use of the Indians of whom Na-sha-Ke-penais, Na-na-wa-nanan, Ke-we-tayash, and Wa-ko-wush, are the Chiefs, so much land on the Roseau River as will furnish one hundred and sixty acres for each family of five, or in that proportion for larger or smaller families, beginning from the mouth of the river; and for the use of the Indians, of which Ka-Ke-Ka-penais is the Chief, so much land on the Winnipeg River, above Fort Alexander, as will furnish one hundred and sixty acres for each family of five, or in that proportion for larger or smaller families, beginning at a distance of a mile or thereabout above the Fort; and for the use of the Indians, of whom Oo-za-we-Kwun is Chief, so much land on the south and east side of the Assiniboine, about twenty miles above the Portage, as will furnish one hundred and sixty acres for each family of five, or in that proportion for larger or smaller families, reserving also a further tract enclosing said reserve, to comprise an equivalent to twenty-five square miles of equal breadth, to be laid out round the reserve; it being understood, however, that if at the date of the execution of this Treaty, there are any settlers within the bounds of any lands reserved by any Band, Her Majesty reserves the right to deal with such settlers as she shall deem just, so as not to diminish the extent of land allotted to the Indians.

And with a view to show the satisfaction of Her Majesty with the behaviour and good conduct of Her Indians, parties to this Treaty, She hereby, through Her Commissioner, makes them a present of three dollars, for each Indian—man, woman and child,—belonging to the Bands here represented.

And further, Her Majesty agrees to maintain a school on each reserve hereby made whenever the Indians of the reserve should desire it.

Within the boundary of Indian Reserves, until otherwise enacted by the proper legislative authority, no intoxicating liquor shall be allowed to be introduced or sold, and all laws now in force or hereafter to be enacted to preserve Her Majesty's Indian subjects inhabiting the reserves or living elsewhere from the evil influence of the use of intoxicating liquors, shall be strictly enforced.

Her Majesty's Commissioner shall, as soon as possible after the execution of this Treaty, cause to be taken an accurate census of all the Indians inhabiting the District above described, distributing them in families, and shall in every year ensuing the date hereof, at some period during the month of July, in each year to be duly notified to the Indians, and at or near the respective reserves, pay to each Indian family of five persons the sum of fifteen dollars Canadian currency, or in like proportion for a larger or smaller family, such payment to be made in such articles as the Indians shall require of blankets, clothing, prints (assorted colors), twine or traps, at the current cost price in Montreal, or otherwise, if Her Majesty shall deem the same desirable in the interests of Her Indian people, in cash.

And the undersigned Chiefs do hereby bind and pledge themselves and their people strictly to observe this Treaty, and to maintain perpetual peace between themselves and Her Majesty's white subjects, and not to interfere with the property or in any way molest the persons of Her Majesty's white or other subjects.

PROVINCE OF MANITOBA & PORTIONS OF NORTH WEST TERRITORIES.

Copy of Map accompanying Treaty Nº 2 executed August 1871.

Copp, Clark & Co Lith. Toronto.

The yellow inner line indicates the boundaries of the Tract surrendered under Treaty Nº 1.
And the red or outer line is laid down as exhibiting the further Cession under Treaty Nº 2.
The blue line shews the boundaries of the Province of Manitoba.
Indian Office
Ottawa, May 1872.

SWAN L.
Porcupine Hills
Pelican Falls
PELICAN L.
Gun Point
WINNIPEGOSIS L.
Elm Pt
Water-hen River
Salt Point
Meadow Point
Thunder Hill
Duck Mountains
Fork R.
Elm Pt
Pole Pt
Pt Pas.
Crane R.
Standy Pt
Drifting R.
DAUPHINE L.
Valley R.
Steep Rock Pt
Turtle R.
Ochre R.
EBB & FLOWER L.
Manitoba House
Long Pt
Swan Pt
Marshy Pt
Oak Pt
MANITOBA
R.C. MISSION
Little Saskatchewan R.
Mossy Point
Beren's R.
BERENS Ft
Cat Fish Cr
Split Cr
Cat Pt
Rabbit Pt
Jack Fish R.
Blood R.
Bulls Head
Dog's Head
Fisher R.
Askandaka I.
Washow R.
Grindstone Pt
Buffalo Hd
EAGLE L.
White R.
Batteaux Pt
Black Pt
BEAR
SNOW SHOE L.
Metasse Pt
Yellow Cr
ALEXANDER
Silver Falls
Mud Pt
Bonnet Pt
RLOisean
BONNET L.
Chute à Jacques
Island Pt
English R.
ISLINGTON MISSION
Netly Cr
Prairie Portage
LOWER FORT GARRY
Seven Portages
Broken Head R.
Birch R.
White Mouth R.
LAC PLAT
Pheasant Hills
Assiniboine R.
Shell R.
Big Cut Arm R.
CROOKED L.
ROUND L.
Riding Mountains
Pine Creek
Arrow R.
Oak R.
Little Saskatchewan R.
Rapid R.
Beaver Cr.
Weed Creek
Winter Trading Post +
Hairy Hills
Moose Mountains
Sand Hills
Blue Hills of Brandon
Blue Hills of Souris
Blue Hills
Pembina Mts
Assiniboine R.
Stinking R or La Riviere Salle
Souris R.
Plateau
Moose or Souris R.
Scratching R.
Big Pt
Two Pts
Red River of the North
Roseau R.
Pembina Ft
ROSEAU
FRONTIER LINE
PROVINCE OF MANITOBA
FORT GARRY

In witness whereof Her Majesty's said Commissioner and the said Indian Chiefs have hereunto subscribed and set their hand and seal, at the Lower Fort Garry, this day and year herein first above mentioned.

Signed, sealed and delivered in the presence, of (the same having been first read and explained).

(Signed,)
ADAMS G. ARCHIBALD,
Lt. Governor of Manitoba and the North-West Territories.

JAMES MCKAY, P.L.C.

A. G. IRVINE, Major.

ABRAHAM COOLEY.

DONALD GUNN, M.L.C.

THOMAS HOWARD,

HENRY COCHANE.

JAMES MCARRISTER,

HUGH MCARRISTER.

E. ALICE ARCHIBALD,

HENRY BOUTHILLIER.

Signed,

WEMYSS M. SIMSON, [*Seal.*]
Indian Commissioner.

his
MIS-KOO-KE-NEW, or Red Eagle (Henry Prince,) +
mark.
his
KA-KE-KA-PENAIS, or Bird forever (William +
Penefather), mark.
his
NA-SHA-KE-PENAIS, or Flying down Bird, +
mark.
his
NA-NA-WA-NANAN, or Centre of Bird's Tail, +
mark.
his
KE-WE-TAY-ASH, or Flying Round, +
mark.
his
WA-KO-WUSH, or Whippoorwill, +
mark.
his
OI-ZA-WE-KWUN, or Yellow Quill, +
mark.

WINNIPEG, MANITOBA, August 27th, 1871.

SIR,—I have the honor to inform you, for the information of His Excellency the Governor General, that I have concluded a Treaty with the Chippewa Indians, without and on the confines of the Province of Manitoba.

The terms upon which the Treaty has been signed, are identical with those of the former Treaty negotiated at the Stone Fort with the Indians of the Province of Manitoba.

The country ceded by the Indians lies to the north and west of the Province of Manitoba, extending on the north to Lake Winnepegosis and the Shell River, and on the west as far as Fort Ellice.

This is a very much larger tract of country than the Province of Manitoba, and contains much fertile and valuable land.

I have just arrived from Manitoba Lake, and find the mail leaving this evening, but I shall shortly be in a position to furnish you with full details upon this matter.

I have, &c.,
WEMYSS M. SIMPSON,
Indian Commissioner.

The Honorable
The Secretary of State
for the Provinces,
&c., &c., &c.

(COPY.)

ARTICLES OF A TREATY, made and concluded this twenty-first day of August, in the year of Our Lord one thousand eight hundred and seventy-one, between HER MOST GRACIOUS MAJESTY THE QUEEN *of Great Britain and Ireland, by Her Commissioner* WEMYSS M. SIMPSON, *Esquire, of the one part, and the* CHIPPEWA *Tribes of Indians, inhabitants of the country within the limits hereinafter defined and described by their Chiefs, chosen and named as hereinafter mentioned, of the other part:*

WHEREAS, all the Indians inhabiting the said country, have, pursuant to an appointment ma le by the said Commissioner, been convened at a meeting at Manitoba Post, to deliberate upon certain matters of interest to Her Most Gracious Majesty of the one part, and to the said Indians of the other; and whereas the said Indians have been notified and informed by Her Majesty's said Commissioner, that it is the desire of Her Majesty to open up to settlement and immigration a tract of country bounded and described as hereinafter mentioned, and to obtain the consent thereto of Her Indian subjects inhabiting the said tract, and to make a Treaty and arrangement with them, so that there may be peace and good-will between them and Her Majesty, and that they may know and be assured of what allowance they are to count upon and receive from Her Majesty's bounty and benevolence.

AND WHEREAS the Indians of the said tract, duly convened in Council as aforesaid, and being requested by Her Majesty's said Commissioner to name certain Chiefs and Head-men who should be authorized on their behalf to conduct such negotiations, and sign any Treaty to be founded thereon, and to become responsible to Her Majesty for the faithful performance by their respective Bands of such obligations as shall be assumed by them, the said Indians have thereupon named the following persons for that purpose, that is to say:—

For the Swan Creek and Lake Manitoba Indians, Lou-sonse, or, Little Long Ears; for the Indians of Fairford and the neighboring localities, Ma-sah-kee-yash, or, He who flies to the bottom, and Richard Woodhouse, whose Indian name is Ke-wee-tah-quun-na-yash, or He who flies round the feathers; for the Indians of Waterhen River and Crane River and the neighboring localities, François, or, Broken Fingers; and for the Indians of Riding Mountains and Dauphin Lake and the remainder of the territory hereby ceded, Mekis (the Eagle), or, Giroux. And thereupon, in open Council, the different Bands have presented their respective Chiefs to His Excellency the Lieutenant Governor of Manitoba and of the North-West Territory, being present at such Council, and to the said Commissioner, as the Chiefs and head men for the purposes aforesaid of the respective Band of Indians inhabiting the said district hereinafter described; and whereas the said Lieutenant Governor and the said Commissioner then and there received and acknowledged the persons so presented as Chiefs and head men, for the purpose aforesaid, of the respective Bands of Indians inhabiting the said district hereinafter described; And whereas the said Commissioner has proceeded to negotiate a Treaty with the said Indians, and the same has finally been agreed upon and concluded as follows, that is to say:—

The Chippewa Tribe of Indians, and all other of the Indians inhabiting the districts hereinafter described and defined, do hereby cede, release, surrender and yield up to Her Majesty the Queen, and Her successors forever, all the lands included within the following limits, that is to say:—All that tract of country lying partly to the north and partly to the west of a tract of land ceded to Her Majesty the Queen by the Indians inhabiting the Province of Manitoba, and certain adjoining localities, under the terms of a Treaty made at Lower Fort Garry on the third day of August last past, the land now intended to

be ceded and surrendered, being particularly described as follows, that is to say :—Begining at the mouth of Winnipeg River, on the north line of the lands ceded by said Treaty, thence running along the eastern shore of Lake Winnipeg, northwardly as far as the mouth of Beren's River ; thence across said Lake to its western shore at the north bank of the mouth of the Little Saskatchewan or Dauphin river ; thence up said stream and along the northern and western shores thereof, and of St. Martin's Lake and along the north bank of the stream flowing into St. Martin's Lake from Lake Manitoba by the general course of such stream to such last mentioned Lake ; thence by the eastern and northern shores of Lake Manitoba to the mouth of the Waterhen River ; thence by the eastern and northern shores of said river up stream to the northermost extremity of a small lake known as Waterhen Lake ; thence in a line due west to and across Lake Winnepegosis ; then in a straight line to the most northerly waters forming the sources of the Shell River ; thence to a point west of the same, two miles distant from the river, measuring at right angles thereto ; thence by a line paralled with the Shell river to its mouth, and then crossing the Assiniboine River and running paralled thereto and two miles distant therefrom, and to the westward thereof to a point opposite Fort Ellice ; thence in a southwesterly course to a northwestern point of the Moose Mountains ; thence by a line due south to the United States frontier ; thence by the frontier eastwardly to the westward line of said tract ceded by Treaty as aforesaid ; thence bounded thereby, by the west, north-west and north lines of said tract to the place of beginning at the mouth of Winnipeg River ; to have and to hold the same to Her Majesty the Queen and Her Successors for ever, and Her Majesty the Queen hereby agrees and undertakes to lay aside and reserve, for the sole and exclusive use of the Indians inhabiting the said tract, the following lots of land, that is to say :—

For the use of the Indians belonging to the Band of which Mekis is Chief, so much land between Turtle River and Valley River, on the south side of Lake Dauphin, as will make one hundred and sixty acres for each family of five persons, or in the same proportion for a greater or smaller number of persons.

And for the use of the Indians belonging to the Band of which François, or Broken Fingers, is Chief, so much land on Crane River, running into Lake Manitoba, as will make one hundred and sixty acres for each family of five persons, or in the same proportion for a greater or smaller number of persons. And for the use of the Band of Indians belonging to the Bands of which Ma-sah-kee-yash and Richard Woodhouse are Chiefs, so much land on the river between Lake Manitoba and St. Martin's Lake,—known as "Fairford River," and including the present Indian Mission grounds,—as will make one hundred and sixty acres for each family of five persons, or in the same proportion for a greater or smaller number of persons. And for the use of the Indians of whom Sonsonse is Chief, so much land on the east side of Lake Manitoba, to be laid off north of the creek near which a fallen elm tree now lies, and about halt way between Oak Point and Manitoba Post, so much land as will make one hundred and sixty acres for each family of five persons, or in the same proportion for a greater or smaller number of persons. Saving, neverthless, the rights of any white or other settler now in occupation of any land within the lines of any such reserve.

And with a view to show the satisfaction of Her Majesty with the behaviour and good conduct of Her Indians, parties to this Treaty, She hereby, through Her Commissioner, makes them a present of three dollars for each Indian—man, woman and child—belonging to the Bands here represented.

And further, Her Majesty agrees to maintain a school in each reserve hereby made whenever the Indians of the reserve shall desire it.

Her Majesty further agrees with her said Indians, that within the boundary of Indian Reserves, until otherwise enacted by the proper legislative authority, no intoxicating liquor shall be allowed to be introduced or sold ; and all laws now in force or hereafter to be enacted to preserve her Indian subjects inhabiting the Reserves or living elsewhere within her North-West Territories from the evil influence of the use of intoxicating liquors, shall be strictly enforced.

And further, that Her Majesty's Commissioner shall, as soon as possible after the execution of this Treaty, cause to be taken an accurate census of all the Indians inhabiting the tract above described, distributing them in families, and shall in every year ensuing the date hereof, at some period during the month of August in each year, to be duly notified to the Indians, and at or near their respective Reserves, pay to each Indian family of five persons, the sum of fifteen dollars, Canadian currency, or in like proportion for a larger or smaller family; such payment to be made in such articles as the Indians shall require, of blankets, clothing, prints (assorted colours), twine or traps, at the current cash price in Montreal, or otherwise, if Her Majesty shall deem the same desirable in the interest of Her Indian people, in cash.

And the undersigned Chiefs, on their own behalf, and on behalf of all other Indians inhabiting the tract within ceded, do hereby solemnly promise and engage to strictly observe this Treaty, and also to conduct and behave themselves as good and loyal subjects of Her Majesty the Queen. They promise and engage that they will, in all respects, obey and abide by the law; that they will maintain peace and good order between each other, and also between themselves and other Tribes of Indians, and between themselves and others of Her Majesty's subjects, whether Indians or Whites, now inhabiting, or hereafter to inhabit, any part of the said ceded tract; and that they will not molest the person or property of any inhabitants of such ceded tract, or the property of Her Majesty the Queen, or interfere with or trouble any person passing or travelling through the said tract, or any part thereof; and that they will aid and assist the Officers of Her Majesty, in bring to justice and punishment, any Indian offending against the stipulations of this Treaty, or infringing the laws in force in the country so ceded.

In Witness whereof, Her Majesty's said Commissioner and the said Indian Chiefs have hereunto subscribed and set their hands at Manitoba Post, this day and year herein first above named.

Signed by the Chiefs within named, in presence of the following witnesses (the same having being first read and explained.)

(Signed,)

Adams G. Archibald,
Lieut. Governor of Manitoba and the N. W. Territories.

James McKay, P.C.C.
Molyneux St. John.
E. A. Archibald.
Lily Archibald.
Henri Bouthillier.
Paul de Laronde.
Donald McDonald.
Eliza McDonald.
Alexander Muir, Sen.

(Signed,)

Wemyss M. Simpson,
Indian Commissioner.

his
Mekis + mark.

his
Son-sonse + mark.

his
Ma-sah-kee-yash + mark.

his
François + mark.

Richard Woodhouse.

Ottawa, 3rd November, 1871.

Sir,—I have the honor to hand in, herewith, my report, accounts and pay-lists connected with the Indian Treaties in the Province of Manitoba and the North-West Territories, and trust they may be found correct and satisfactory.

I have, &c.,
Wemyss M. Simpson,
Indian Commissioner.

Hon. Joseph Howe,
Secretary of State for the Provinces,
&c., &c., &c., Ottawa.

(Copy.)

INDIAN DEPARTMENT, DOMINION OF CANADA.

W. M. SIMPSON, Indian Commissioner, in account with Government of Manitoba

1871		Dr.	Cr.
		$ cts.	$ cts.
July 20..	To Cash paid W. M. Simpson, Indian Commissioner	3,500.00	
	By paid S. J. Dawson, for Rainy Lake Indians (see receipt herewith)		3,500.00
Aug. 5..	To Cash paid W. M. Simpson	3,000.00	
	do do	3,000.00	
7..	do do	1,073.25	
	By paid Capt. Villiers, expenses of constables (account A)		1,073.25
12..	To Cash paid W. M. Simpson	4,000.00	
30..	do do	2,000.00	
	do do	778.67	
	By paid J. J. Hargrave, per R. Tait (account B)		778.67
Sept. 1..	To Cash paid W. M. Simpson	550.77	
	By paid A. Boyd, for tobacco (account C)		550.77
	To Cash paid W. M. Simpson	660.63	
	By paid John Schultz, for tea (account D)		660.63
	To Cash paid W. M. Simpson	28.00	
	By paid W. Harvey, for horse hire (account E)		28.00
	To Cash paid W. M. Simpson	316.05	
	By paid J. Romans, for teams (accounts F G)		316.05
	To Cash paid W. M. Simpson	87.96	
	By paid Bannatyne & Begg (accounts H I)		87.96
	To Cash paid W. M. Simpson	17.40	
	By paid J. Brennan, for beer (account K)		17.40
Aug. 4..	To Cash paid W. M. Simpson	35.00	
	By paid J. Nesbit, for labor (account L)		35.00
5..	To Cash paid W. M. Simpson	109.00	
	By paid A. M. Brown & Co., for sundries (account M)		109.00
6..	To Cash paid W. M. Simpson	68.13	
	By paid A. McDermott, for teams (account N)		68.13
	To Cash paid W. M. Simpson	7.28	
	By paid W. H. Lyon (account O)		7.28
9..	To Cash paid W. M. Simpson	669.50	
	By paid J. McKay, for sundries (account P)		669.50
12..	To Cash paid W. M. Simpson	25.00	
	By paid G. Murdoch, for team (account Q)		25.00
Sept. 12..	To Cash paid W. M. Simpson	3.75	
	By paid Bannatyne & Begg (account R)		3.75
15..	To Cash paid W. M. Simpson	5,000.00	
	do do	894.00	
	do do	3,324.44	
	By paid Hudson Bay Company (account S)		3,324.44
	To Cash paid W. M. Simpson	3,150.00	
	By paid Major Peebles, Control Department, pork (account ◇		3,150.00
	To Cash paid W. M. Simpson	100.00	
	By paid M. St. John (account T)		100.00
	To Cash paid W. M. Simpson	40.10	
	By paid Geo. Archibald (Account U)		40.00
	See account furnished by Provincial Treasurer, Manitoba ◇	$32,438.93	
	By Cash paid Chief Yellow Quill $50, and his brave Exetapetung $40, per advice of Gov. Archibald and Hon. J. McKay. (See letter of 9th August, marked V)		90.00
	By paid hire of a horse, 20th July (account W)		5.00
	" Interpreters, 5th August (account X)		68.00
	" do 5th Sept. (account Y)		26.00
	" W. Harvey's account, 4th Sept. (account Z)		35.00
	" H. B. Co.'s account, Oak Point (account No. 1)		20.60
	" do Manitoba House (account No. 2)		66.13
	" Butcher's account (account No. 3)		8.80
	" expenses at Oak Point and Manitoba H. (acct. No. 4)		22.62
	Carried forward	$32,438 93	$14,887.68

W. M. SIMPSON, Indian Commissioner, in account with Government of Manitoba.

1871		Dr.	Cr.
		$ cts.	$ cts.
	Amount brought forward	32,438.93	14,887.07
	By paid Richard Woodhouse, $40; and his spokesman, John Anderdon, $20 (account No. 5)		60.00
	" Masahkeeyash, $40; and his spokesman, David Marsden, $20 (account No. 6)		60.00
	" Sousonse, $40; and his spokesman, Naycanwaywaywetung, $20 (account No. 7)		60.00
	" Mekis, $40; 2 councillors and 2 braves, at $20 each, $80 (account No. 8)		120.00
	" Sousonse, 3 braves, each $20 (account No. 9)		60.00
	" François or Broken Fingers, $40; and his spokesman, $20 (account No. 10)		60.00
	" 3 braves of Fraçnois, each $20 (account No. 11)		60.00
	" John Nesbit's account (account No. 12)		10.00
	" Wm. Drever's account (account No. 13)		15.00
	" sundry expenses (account No. 14)		12.25
	" A. M. Brown & Co's account (account No. 15)		8.75
	" H. B. Co., for Pembina Indians (account No. 16)		648.00
	" do Fort Alexander Indians (account No. 17)		150.00
	" N. McEachran's account (account No. 18)		98.50
	August 22nd, 1871.		
	By Cash paid Riding Mountain Indians, Treaty No. 2, at Manitoba House $444.00		
	" Fairford Indians. 486.00		
	" do 552.00		
	" Waterhen and Crane Rivers 696.00		
	" Lake Manitoba 924.00		
	$6 per head, 1st and 2nd payments, Treaty No. 2		3,102.00
	Paid at Stone Fort, August 4th and 5th, 1871.		
	By Cash paid Henry Prince's Band, Treaty No. 1 $2,910.00		
	" Fort Alexander Band 150.00		
	" Brokenhead River Band. 129.00		
	" Pembina Band 1,092.00		
	" Portage la Prairie Band 963.00		
	" Fort Garry Band 426.00		
	$3 per head, total 1st payment, and $3 per head to American Indians who were at Treaty $5,670.00		5,670.00
	By Cash paid Henry Prince's Band, Treaty No. 1 $4,221.00		
	" Fort Alexander Band, H. B. Company, No. 1 ($150 account No. 17)		
	" Brokenhead River Band 447.00		
	" Pembina Band, $648, H. B. Co. (acct. 16) 300.00		
	" Portage la Prairie Band 1,749.00		
	" Fort Garry Band 645.00		
	$3 per head, total 2nd payment $7,362.00		7,362.00
	By paid Wasusququn for advising Indians to collect		3.00
	" John Lovell, for printing and postage (account No. 19)		5.53
	To Balance due Commissioner	13.18	
		$32,452.11	$32,452.11

Omitted travelling expenses due W. M. Simpson ..... $ 13.18
208.90
$222.08

(Signed,) WEMYSS M. SIMPSON

Indian Commissioner

OTTAWA, November 3rd, 1871.

To the Honorable
the Secretary of State for the Provinces,
Ottawa.

SIR,—

I have the honor to submit to you, for the information of His Excellency the Governor General, a report of my negotiations with the Indians of the Province of Manitoba, and with certain of the Indians of the North-West Territory, entered upon by me, in accordance with your instructions, dated 3rd May, 1871.

Having, in association with S. J. Dawson, Esquire, and Robert Pether, Esquire, effected a preliminary arrangement with the Indians of Rainy Lake, the particulars of which I have already had the honor of reporting to you in my report, dated July 11th, 1871, I proceeded by the Lake of the Woods and Dawson Road to Fort Garry, at which place I arrived on the 16th July.

Bearing in mind your desire that I should confer with the Lieutenant Governor of Manitoba, I called upon Mr. Archibald, and learned from him that the Indians were anxiously awaiting my arrival, and were much excited on the subject of their lands being occupied, without attention being first given to their claims for compensation. Amongst the settlers, also, an uneasy feeling existed, arising partly from the often-repeated demands of the Indians for a Treaty with themselves, and partly from the fact that certain settlers in the neighbourhood of Portage La Prairie and other parts of the Province, had been warned by the Indians not to cut wood or otherwise take possession of the lands upon which they were squatting. The Indians, it appeared, consented to their remaining on their holdings until sufficient time had been allowed for my arrival, and the conclusion of a treaty; but they were unwilling to allow the settlers the free use of the country for themselves or their cattle. Mr. Archibald, and those residents in the Province of Manitoba with whom I conversed on the subject, appeared to think that no time should be lost in meeting the Indians, as some assurances had already been given them that a Treaty would be made with them during the summer of 1871; and I therefore, at once, issued notices calling certain of the Indians together, naming two places at which I would meet them. The first meeting, to which were asked the Indians of the Province and certain others on the eastern side, was to be held on the 25th of July, at the Stone Fort, a Hudson's Bay Company's Post, situated on the Red River, about twenty miles northward of Fort Garry—a locality chosen as being the most central for those invited. The second meeting was appointed to be held on August 17th, at Manitoba Post, a Hudson's Bay Company's Post, at the north-west extremity of Lake Manitoba, as it was deemed that such of the bands of Indians residing without the limits of the Province of Manitoba, as I purposed to deal with at present, would meet here more readily than elsewhere.

On Monday, the 24th of July, I met the Lieutenant Governor of Manitoba at the Stone Fort, but negotiations were unavoidably delayed, owing to the fact that only one band of Indians had arrived, and that until all were on the spot those present declined to discuss the subject of a Treaty, except in an informal manner. Amongst these, as amongst other Indians with whom I have come in contact, there exists great jealousy of one another, in all matters relating to their communication with officials of Her Majesty; and in order to faciliate the object in view, it was most desirable that suspicion and jealousy of all kinds should be allayed. The fact of the Commissioner having arrived was sufficient evidence of the good intentions of Her Majesty's Government, and it seemed better to await the arrival of all whom I had summoned, than to press matters to an issue while any were absent. This, however, entailed the necessity of feeding those who were already there, and others as they arrived.

It is customary in dealing with Indians to do so, and in this case it was absolutely necessary, for, obviously, it would have been impossible to invite those

people from a distance, and then leave them to starve at our doors, or, in search of food, to plunder the neighborhood into which they had been introduced. At that season of the year the Indians were not engaged in fishing or hunting, and consequently large numbers of men, women and children attended at the place of meeting, for all of whom food was provided. The price of provisions, even at the lowest price for which they could be obtained was high, pork being fifty dollars a barrel, and flour twenty shillings stg. per hundred, and such cattle as I was able to purchase £16 per head, so that the expense of keeping the Indians during the negotiation of Treaty and payment of the gratuity, which lasted eleven days, forms no small share of the total expenditure. In addition to this expense, it was thought necessary by the Lieutenant Governor that Major Irvine, commanding the troops at Fort Garry should be requested to furnish a guard at the Stone Fort during the negotiations, and that there should be at hand, also, a force of constabulary for the purpose of preventing the introduction of liquor amongst the Indian encampments; other expenses of a somewhat similar nature were incurred which would be totally unnecessary upon any future occasion of payment being made to the Indians of Manitoba. I may here refer to the apparently prolonged duration of the first negotiation, and explain, in reference thereto, the causes, or some of them, that entailed the loss of time and attendant expense. For some time, a doubt has existed whether the Chief, nominally at the head of the Indians of the Indian settlement, possessed the good will and confidence of that Band, and I thought it advisable to require that the several bands of Indians should select such Chiefs as they thought proper, and present these men as their authorized chiefs, before anything was said as to the terms of a Treaty. The Indians having acquiesced in this proposal, forthwith proceeded to such election; but the proceeding apparently involved discussion and consideration amongst themselves, and two days elapsed before the men chosen were presented for recognition, and the business of the meeting commenced.

When the peculiar circumstances surrounding the position of the Indians of the Province were pointed out, the future of the country predicted, and the views and intentions of the Government explained by the Lieutenant Governor and myself, the Indians professed a desire for time to think over what had been said before making any reply, and when their answer came it proved to contain demands of such an exorbitant nature, that much time was spent in reducing their terms to a basis upon which an arrangement could be made.

Every Band had its spokesman, in addition to its chief, and each seemed to vie with another in the dimensions of their requirements. I may mention, as an illustration, that in the matter of Reserves, the quantity of land demanded for each Band, amounted to about three townships per Indian, and included the greater part of the settled portions of the Province. It was not until the 3rd of August, or nine days after the first meeting, that the basis of arrangement was arrived at, upon which is founded the Treaty of that date. Then, and by means of mutual concessions, the following terms were agreed upon. For the cession of the country described in the Treaty referred to, and comprising the Province of Manitoba, and certain country in the North-East thereof, every Indian was to receive a sum of three dollars a year in perpetuity, and a Reserve was to be set apart for each Band, of sufficient size to allow one hundred and sixty acres to each family of five persons, or in like proportion as the family might be greater or less than five. As each Indian settled down upon his share of the Reserve, and commenced the cultivation of his land, he was to receive a plough and harrow. Each chief was to receive a cow and a male and female of the smaller kinds of animals bred upon a farm. There was to be a bull for the general use of each Reserve. In addition to this, each Chief was to receive a dress, a flag and a medal, as marks of distinction, and each Chief with the exception of Bozawequare, the Chief of the Portage Band, was to receive a Buggy, or light spring waggon. Two councillors and two braves of each Band, were to receive a dress, somewhat inferior to that provided for the Chiefs, and the braves and councillors of the Portage Band excepted, were to receive a buggy. Every Indian was

to receive a gratuity of three dollars, which, though given as a payment for good behaviour was to be understood to cover all dimensions for the past.

On this basis, the Treaty was signed by myself and the several Chiefs, on behalf of themselves and their respective Bands, on the 3rd of August, 1871, and on the following day the payment commenced.

The three dollars gratuity, above referred to, will not occur in the ordinary annual payments to the Indians of Manitoba, and, though doubling the amount paid this year, may now properly be regarded as belonging to a previous year, but only now liquidated.

A large number of Indians, entitled to share in the Treaty, were absent on the 3rd August, and in the belief that I should, almost immediately, be able to obtain a more accurate knowledge than I possessed of the numbers of the several Bands, I paid to each person present, only three dollars—the gratuity—postponing for a short time the first annual payment. Having completed this disbursement, I prepared to start for Manitoba Post, to open negotiations with the Indians on the immediate North and North-West borders of the Province of Manitoba, promising however to visit the several Bands, of the first Treaty, in their own districts, and to there pay them. By this means, the necessity for their leaving their own homes, and for the Government's feeding them while they were being paid, and during their journey home, was avoided.

After completing the Treaty at Manitoba Post, of which mention is hereinafter made, I visited Portage La Prairie, the Indian settlement at St. Peter's, Rivière Marais, and the Town of Winnipeg, according to my promise, and at each place, with the exception of Rivière Marais, found the Indians satisfied with the Treaty, and awaiting their payment. At Rivière Marais, which was the rendevouz appointed by the Bands living in the neighbourhood of Pembina, I found that the Indians had either misunderstood the advice given them by parties in the settlement, well disposed towards the Treaty, or, as I have some reason to believe, had become unsettled by the representations made by persons in the vicinity of Pembina, whose interests lay elsewhere than in the Province of Manitoba; for, on my announcing my readiness to pay them, they demurred at receiving their money until some further concessions had been made by me.

With a view to inducing the Indians to adopt the habits and labors of civilization, it had been agreed, at the signing of the Treaty as before mentioned, to give certain animals as a nucleus for stocking the several reserves, together with certain farming implements, and it was now represented to me by the spokesman of the bands that as the Queen had, with that kindness of heart which distinguished her dealings with her red children, expressed a desire to see the Indians discard their former precarious mode of living and adopt the agricultural pursuits of the white man, they were desirous of acceding to the wish of their great Mother, and were now prepared to receive the gifts she had been good enough to speak of, through Her Commissioner, in full. But, as it could make no difference whatever to their great Mother whether these things were given in kind or in money value, Her red children of the Pembina bands were resolved to receive them in the latter form. I had put a valuation upon all the articles mentioned in the supplement to the Treaty, and could go no further in the matter unless I was prepared to pay them for all these articles at the rates they would now proceed to mention. I declined to comply with the request, and they declined to receive their first annual payment, whereupon I broke up my camp and retured to Winnipeg. As I foresaw, at the time, this determination on their part was shortly repented, and a number of their leading men were subsequently paid at Winnipeg, while at the request of the Indians, the money for the remainder, together with a pay sheet, was forwarded to the officer in charge of the Hudson's Bay Company's Post at Pembina, with instructions to pay the Indians as per list as each might present himself. At Portage La Prairie, although the number paid at the Stone Fort was largely increased, there still remained many who from absence or other causes were not paid, and by the request of the Chief the money was left for these with the officers in charge of the Hudson's Bay Company's Post in the same manner as was done for the Pembina bands.

As I was unable to proceed to Fort Alexander, the payments for the Indians or for such of them as were present at the signing of the Treaty were sent in like manner to the officer in charge of the Hudson's Bay Company's Post at Fort Alexander, but it may be as well to mention that the number so paid will fall far short of the total number belonging to that place. The latter remark will apply to the Pembina band, for their payment was sent as per gratuity list, and there must necessarily have been others who did not receive payment. All these must receive their back payments during the course of next year.

During the payment of the several bands, it was found that in some, and most notably in the Indian settlement and Broken Head River Band—a number of those residing among the Indians, and calling themselves Indians, are in reality half-breeds, and entitled to share in the land grant under the provisions of the Manitoba Act. I was most particular, therefore, in causing it to be explained, generally and to individuals, that any person now elected to be classed with Indians and receiving the Indian pay and gratuity would, I believed, thereby forfeit his or her right to another grant as a half-breed, and in all cases where it was known that a man was a half-breed, the matter, as it affected himself and his children. was explained to him, and the choice given him to characterize himself. A very few only decided upon taking their grant as Half-breeds. The explanation of this apparent sacrifice is found in the fact that the mass of these persons have lived all their lives on the Indian Reserves (so called), and would rather receive such benefits as may accrue to them under the Indian Treaty than wait the realization of any value in their half-breed grant.

The Lieutenant Governor of Manitoba having expressed a desire to be present at the negotiation of the Treaty at Manitoba Post, His Honor, accompanied by the Honorable James McKay, proceeded thither with me, in company with Mr. Molyneux St. John, the Clerk of the Legislative Assembly of Manitoba, who had assisted me in the duties connected with the former Treaty and payments. I left Winnipeg on the 13th August, but owing to adverse winds on Lake Manitoba, did not arrive until two days after the time appointed. I found that, in the meanwhile, the officer in charge of the Hudson's Bay Company's Post had been obliged to give some provisions to the Indians pending my arrival, but on my speaking to the leading men of the bands assembled, it was evident that the Indians of this part had no special demands to make, but having a knowledge of the former Treaty, desired to be dealt with in the same manner and on the same terms as those adopted by the Indians of the Province of Manitoba.

The negotiation with these bands therefore occupied little time, and on the 21st August 1871, a Treaty was concluded by which a tract of country three times as large as the Province of Manitoba was surrendered by the Indians to the Crown. Payment in full, that is to say, the gratuity and the first payment was at once made, and I have since written to the officers in charge of the Hudson's Bay Company's Posts within the tract above referred to, requesting them to procure for me a reliable census of the Indians, parties to this Treaty.

I have referred to the cost of effecting these Treaties, and remarked that it will prove to be exceptional. It may be regarded as entirely so as far as the Indians with whom the dealing were held are concerned. In the future the annual payment will be only one-half to each Indian of the amount paid this year, for the gratuity was the same as the payment, and the heavy expense of feeding the Indians while at the place of meeting and on their journey home will be avoided by the payment being made at or near their own Reserves.

All the collateral expenses, therefore, of this year, including dresses, medals, presents, to the Indians, &c., &c., will not appear in the expenses attending during future payments.

But it is to be remembered that a large number of Indians, whose lands were ceded by the second Treaty, were not present. The distance from the hunting grounds of some to Manitoba Post is very great, but while their absence was to be regretted for some reasons, it affected a very considerable saving in the item of provisions.

During the ensuing season, these persons will probably be found at the place where the payments will be made, and will then require their payments as if they had been present at the signing of the Treaty.

Of the land ceded in the Province of Manitoba, it will be hardly necessary for me to speak, as His Excellency the Governor-General is already in possession of accurate information touching its fertility and resources; but I may observe that, valuable as are these lands, they are fully equalled if not exceeded by the country of which the Government now comes into possession, by virtue of the Treaty concluded at Manitoba Post. Already, settlers from the Provinces in Canada and elsewhere, are pushing their way beyond the limits of the Province of Manitoba, and there is nothing but the arbitrary limits of that province, and certain wood and water advantages found in the Territory beyond it, to distinguish one part of the country from the other. The fertility that is possessed by Manitoba, is shared by the country and its confines. The water courses of the Province are excelled by those of the Territory, and the want of wood which threatens serious difficulty in the one is by no means so apparent in the other.

The Indians of both parts, have a firm belief in the honor and integrity of Her Majesty's representatives, and are fully impressed with the idea that the amelioration of their present condition is one of the objects of Her Majesty in making these treaties. Although many years will elapse before they can be regarded as a settled population, settled in the sense of following agricultural pursuits, the Indians have already shown a disposition to provide against the vicissitudes of the chase by cultivating small patches of corn and potatoes. Moreover, in the Province of Manitoba, where labor is scarce, Indians give great assistance in gathering in the crops. At Portage La Prairie, both Chippewas and Sioux, were largely employed in the grain field, and in other parishes, I found many farmers whose employés were nearly all Indians.

Although serious trouble has from time to time occurred across the boundary line with Indians of the same tribes, and indeed of the same bands as those in Manitoba, there is no reason to fear any trouble with those who regarded themselves as subjects of Her Majesty. Their desire is to live at peace with the white man, to trade with him, and, when they are disposed, to work for him, and I believe that nothing but gross injustice or oppression will induce them either to forget the allegiance which they now claim with pride, or molest the white subjects of the Sovereign whom they regard as their supreme chief.

The system of an annual payment in money, I regard as a good one, because the recipient is enabled to purchase just what he requires when he can get it most cheaply, and it also enables him to buy articles at second hand, from settlers and others, that are quite as useful to him as are the same things when new. The sum of three dollars does not appear to be large enough to enable an Indian to provide himself with many of his winter necessaries, but as he receives the same amount for his wife or wives, and for each of his children, the aggregate sum is usually sufficient to procure many comforts for his family, which he would otherwise be compelled to deny himself.

I desire to call the attention of His Excellency to the fact that there is now within the Province of Manitoba, a band of Sioux Indians. They are, properly speaking, American Indians, and many of them are refugees from America, excluded on account of the part they took in the Minnesota massacre. Since their appearance in British Territory, they have, on all occasions, conducted themselves in a quiet and orderly manner, and although they acknowledge the fact of their having no claim upon Her Majesty, they look with hope to her benevolence in their endeavors to live in peace and quiet within her possessions. They cannot justly be treated on the same footing as the Chippewas, Crees, and other tribes of the North-West, but it is open to doubt whether it is advisable to leave them entirely uncared for when the absence of game, the scarcity of grain, or other causes tend to reduce them to a starving and therefore desperate condition. I will not at present suggest any course to be pursued with regard to these Indians, merely desiring for the moment, to draw the attention of His Excellency to the subject.

I desire also to call the attention of His Excellency to the state of affairs in the Indian country on the Saskatchewan. The intelligence that Her Majesty is treating with the Chippewa Indians has already reached the ears of the Cree and Blackfeet tribes. In the neighborhood of Fort Edmonton, on the Saskatchewan, there is a rapidly increasing

population of miners and other white people, and it is the opinion of Mr. W. J. Christie, the officer in charge of the Saskatchewan District, that a Treaty with the Indians of that country, or at least an assurance during the coming year that a Treaty will shortly be made, is essential to the peace, if not the actual retention of the country. I would refer His Excellency, on this subject, to the report of Lieutenant Butler, and to the enclosed memoranda of Mr. W. J. Christie, the officer above alluded to. Amongst the papers accompanying this report is a requisition for dresses, buggies, medals, &c., as promised to the Indians, which I trust may receive early consideration, so that contracts may be given out in time to enable all of the articles named being distributed early in the coming season.

I take this opportunity of acknowledging the assistance afforded me in successfully completing the two Treaties, to which I have referred, by His Honor the Lieutenant Governor of Manitoba, the Honorable James McKay, and the officers of the Hudson's Bay Company. In a country where transport and all other business facilities are necessarily so scarce, the services rendered to the Government by the officers in charge of the several Hudson's Bay Posts has been most opportune and valuable.

I have, &c.,

WEMYSS M. SIMPSON,
Indian Commissioner.

EDMONTON HOUSE,

13th April, 1871.

Extract of a Despatch,—W. J. Christie, Esq., Chief Factor to Lieut. Governor Archibald, bearing date, Edmonton House, 13th April, 1871.

"On the 13th instant (April) I had a visit from the Cree Chiefs, representing the Plain Crees from this to Carlton, accompanied by a few followers.

The object of their visit was to ascertain whether their lands had been sold or not, and what was the intention of the Canadian Government in relation to them. They referred to the epidemic that had raged throughout the past summer, and the subsequent starvation, the poverty of their country, the visible diminution of the buffalo, their sole support, ending by requesting certain presents *at once*, and that I should lay their case before Her Majesty's Representative at Fort Garry. Many stories have reached these Indians through various channels, ever since the transfer of the North-West Territories to the Dominion of Canada, and they were more anxious to hear from myself what had taken place.

I told them that the Canadian Government had as yet made no application for their lands or hunting grounds, and when anything was required of them, *most likely Commissioners* would be sent before hand to treat with them, and that until then they should remain quiet and live at peace with all men. I further stated that Canada, in her Treaties with Indians, heretofore, had dealt most liberally with them, and that they were now in settled houses and well off, and that I had no doubt in settling with them the same liberal policy would be followed.

As I was aware that they had heard many exaggerated stories about the troops in Red River, I took the opportunity of telling them why troops had been sent; and if Her Majesty sent Troops to the Saskatchewan, it was as much for the protection of the red as the white man, and that they would be for the maintenance of law and order.

They were highly satisfied with the explanations offered, and said they would welcome civilization. As their demands were complied with, and presents given to them, their immediate followers, and for the young men left in camp, they departed well pleased for the present time, with fair promises for the future. At a subsequent interview with the Chiefs alone, they requested that I should write down their words, or messages to their "Great Master" in Red River. I accordingly did so, and have tran-

mitted the messages as delivered. Copies of the Proclamation issued, prohibiting the traffic in spirituous liquors to Indians or others, and the use of strychnine in the destruction of animal life, have been received, and due publicity given to them. But without any power to enforce these laws, it is almost useless to publish them here; and I take this opportunity of most earnestly soliciting, on behalf of the Company's servants, and settlers in this District, that protection be afforded to life and property here as soon as possible, and that Commissioners be sent to speak with the Indians on behalf of the Canadian Government.

MEMORANDA:

Had I not complied with the demands of the Indians—giving them some little presents,—and otherwise satisfied them, I have no doubt that they would have proceeded to acts of violence, and once that had commenced, there would have been the beginning of an Indian war, which it is difficult to say when it would have ended.

The buffalo will soon be exterminated, and when starvation comes, these Plain Indian Tribes will fall back on the Hudson's Bay Forts and settlements for relief and assistance. If not complied with, or no steps taken to make some provision for them, they will most assuredly help themselves; and their being no force or any law up there to protect the settlers, they must either quietly submit to be pillaged, or lose their lives in the defence of their families and property, against such fearful odds that will leave no hope for their side.

Gold may be discovered in paying quantities, any day, on the eastern slope of the Rocky Mountains. We have, in Montana, and in the mining settlements close to our boundary line, a large mixed frontier population, who are now only waiting and watching to hear of gold discoveries to rush into the Saskatchewan, and, without any form of Government or established laws up there, or force to protect whites or Indians, it is very plain what will be the result.

I think that the establishment of law and order in the Saskatchewan District, as early as possible, is of most vital importance to the future of the country and the interest of Canada, and also the making of some Treaty or settlement with the Indians who inhabit the Saskatchewan District.

W. J. CHRISTIE, Chief Factor,
In charge of Saskatchewan District,
and Hudson's Bay Company.

Messages from the Cree Chiefs of the Plains, Saskatchewan, to His Excellency Governor Archibald, our Great Mother's Representative at Fort Garry, Red River Settlement.

1. The Chief SWEET GRASS, The Chief of the Country,

GREAT FATHER,—

I shake hands with you, and bid you welcome.—We heard our lands were sold and we did not like it; we don't want to sell our lands; it is our property, and no one has a right to sell them.

Our country is getting ruined of fur bearing animals, hitherto our sole support, and now we are poor and want help—we want you to pity us. We want cattle, tools, agricultural implements, and assistance in everything when we come to settle—our country is no longer able to support us.

Make provision for us against years of starvation. We have had great starvation the past winter, and the small-pox took away many of our people, the old, young, and children.

We want you to stop the Americans from coming to trade on our lands, and giving firewater, ammunition and arms to our enemies the Blackfeet.

We made a peace this winter with the Blackfeet. Our young men are foolish, it may not last long.

We invite you to come and see us and to speak with us. If you can't come yourself, send some one in your place.

We send these words by our Master, Mr. Christie, in whom we have every confidence. —That is all.

2. "Ki-he-win," "The EAGLE,"

GREAT FATHER,—

Let us be friendly. We never shed any whiteman's blood, and have always been friendly with the whites, and want workmen, carpenters and farmers to assist us when we settle. I want all my brother "Sweet Grass" asks. That is all.

3. "The LITTLE HUNTER,"

You, my brother, the Great Chief in Red River, treat me as a brother, that is, as a Great Chief.

4. "Kis-ki-on," or "SHORT TAIL,"

My brother, that is coming close, I look upon you, as if I saw you; I want you to pity me, and I want help to cultivate the ground for myself and descendants. Come and see us.

NOVA SCOTIA AND NEW BRUNSWICK.

The additions made last year by Parliament to the Indian Grants for these Provnices have enabled me to partially introduce into both, the system of management which has worked so well in the larger Provinces of Quebec and Ontario. In Nova Scotia, for many years, Indians and Indian Lands had been committed to the charge of the Commissioner of Crown Lands—an over worked officer—who could rarely leave Halifax, and who could exercise no personal supervision over the Mic-macs scattered through eighteen counties, with the most reliable of whom—who seldom drifted to the Capital—he rarely came in contact. Through well disposed persons, who gave their services gratuitously, coats and blankets, and occasionally seeds and implements were annually distributed, but the Indians had nobody within reach of their settlements, whose duty it was to counsel with and protect them, or to encourage them by special aid, judiciously applied, to abandon the chase, which has long ceased to be profitable and *fall back* on the cultivation of the soil. Fully alive to the defects of the old system, Mr. Fairbanks cheerfully retired from the service, and I only regret that the limited fund at my disposal enabled me to make him a very moderate compensation for the three years service given to the Dominion.

The old system has now been changed. The Province has been divided into seven Districts. An active resident agent has been appointed in each. The reserves, too lavishly granted away by the Provincial Government, will now be effectually protected, and the annual grants, instead of being merely distributed in an *eleemosynary* spirit, will be applied to promote education and to encourage habits of industry. Help will no longer be given to the idle and the profligate, but only to those who show a disposition to advance and help themselves.

The salutary check upon the manufacture of doctors' bills for attendance upon sick Indians, which was applied for many years by the Government and Legislature of Nova Scotia, has been forced upon this Department by the absurd quantity of such claims which were sent to Ottawa, so soon as the idea got abroad that the Indian funds here were unlimited, and that the old restrictions had passed away with the old forms of Government. The profession have been notified that the old checks are in force, that no bills for medical attendance will be noticed which have not been first audited and paid by the Court of

Sessions, when one-half will be returned to the County authorities from Indian funds. Services specially authorized by the Department or by the Local Agents will alone be paid in full.

New Brunswick has been divided into two Districts; the southern, which is inhabited by the Milicites, includes the Counties of Victoria, Carleton, York, Sunbury, Queen's, Charlotte, King's, St. John; and the northern, over which the Mic-macs chiefly roam, will comprise the Counties of Restigouche, Gloucester, Northumberland, Westmoreland, Kent, Albert.

In New Brunswick the Reserves are larger and more valuable than in Nova Scotia, and appear to have been better preserved. A vast deal of timber has, however, been stripped off of them, under a loose system which has produced but little or no revenue for permanent investment. A more vigilant supervision will turn this property to more account, and it is hoped that by the promotion of education, and through the agency of a more direct and vigilant superintendence than has hitherto obtained, the Indians in New Brunswick may yet be stimulated to come more nearly up to the standard of intelligence and self-help which has been attained by so many of the Red men of Canada.

The Report of the Deputy Superintendent, showing in detail the ordinary working of the Department, and the results of the year's operation is appended.

All of which is respectfully submitted.

JOSEPH HOWE.

APPENDIX.

INDIAN OFFICE, OTTAWA.

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,

25th April, 1872.

SIR,—I have the honor to submit the Annexed Report on Indian affairs for the year terminated, 30th June, 1871, accompanied by the usual particulars, in tabular form, relative to the Receipts and Expenditure, the condition of the Indian Funds, the disposable lands open for sale, Population returns, Indian Schools, Office work, and other details relating to the operations of this branch of the Public Service.

The amounts received from these sources were $\$95{,}765\ \frac{65}{100}$ against $\$61{,}445\ \frac{9}{100}$ for the previous year, being an increase of $\$34{,}320\ \frac{56}{100}$. These figures, however, exhibit but imperfectly the soundness of the policy of opening out the Colonization Roads, which, while proving highly beneficial to the new settlers, has, by offering facilities for penetrating into the wooded lands, drawn in a marked degree the attention of individuals to the advantages which the Indian lands present; and has been the means of attracting to them a class of persons much superior to those who, under other circumstances, would become occupants.

It induces, likewise, an earlier sale of the lands, and the consequent speedy clearing and cultivation of them.

PROVINCE OF ONTARIO.

The expenditure in the construction of roads of that description in the Saugeen Peninsula, and the Manitoulin Island, was $\$6,240\frac{11}{100}$, and the work performed was supplementary, and in continuation of that of former years.

The line of road through the Saugeen Peninsula has now been opened out a distance equal to about ten miles of the northern extremity of the Peninsula, at the Harbor of Bury, and will be completed to that point in the course of the present season; and thus form a line of travel by land to within twenty-five miles by water of the Great Manitoulin Island.

The line of road on the Manitoulin Island, commenced in the year 1866, has now been completed a distance of about fifty miles, extending from Little Current to Shaguiandah, Manitowaning, and Michael Bay, and is now in course of extension to Providence Bay.

This is in marked contrast to the state of the Island, when, in October, 1862, the cession from the Indians was obtained, and not a single mile of constructed road existed. During the last summer and autumn, many additional settlers went up, and commenced farming operations, and the intelligence received gives promise of a still larger influx during the coming season. An excellent flouring mill has been built at Shaguiandah, and another at Providence Bay will be erected this spring, upon a location disposed of on that express condition. A saw mill additional to that on Michael Bay, worked by Lyon and Co., is also building on Mindemoga River, which flows into Providence Bay.

The climate and soil of those parts of the Island best suited for settlement, are well spoken of by the resident settlers.

In the Saugeen Peninsula, it would appear from the assessment rolls, that actual settlement is proceeding satisfactorily, and many additional settlers have taken possession of the lands sold to them.

The projected line of road, through the Golais and Batchewana Bay Reserve, in rear of the Sault St. Marie, has been carefully examined, with a view to the construction of some sections of it during the present season. A considerable portion of the land along its course has been found to be well timbered and adapted for agricultural purposes; and so soon as the road, (on both sides of which, and abutting upon it, lots have been marked off for settlement), that the lands will be taken up, and occupied by the purchasers.

The saw mill in this tract, built by Messrs. Harris and Jones, near Carp River, has been for some time in full operation.

A reference to the statement in the Appendix, relative to education, will afford useful information, and show the schools aided both from Indian funds and by different Societies.

It will be perceived from the School Reports, that agriculture is being taught at the Mount Elgin Institution, together with other industrial pursuits.

And also, in the Institution near Brantford, sustained by the New England Company, instructions in similar branches of employment are afforded.

The position of most of the bands in the Province of Ontario, continues, as respects revenue, to improve, and the expenditure is carefully watched. In the collection of rents of lands belonging to the Mohawks of Tyendenaga, by the Local Agent, and the control of them being with this office in the stead of its being with the Chiefs and Council, those people have now a revenue considerably increased; and as I had some years since carried out a similar plan in the case of the Iroquois of St. Regis, I was prepared for the satisfaction which the change has occasioned to the Mohawks.

PROVINCE OF QUEBEC.

The settlement up the Gatineau, in the Township of Maniwaki, known as the River Desert Settlement, to which have resorted many Indians from the Lake of Two Mountains, has been steadily increasing, and the Agent resident in that Township reports that many families, to the heads of which farm lots were located, have made fair progress in clearing and cultivation, and that other families are from time to time joining them.

A limited quantity of seed grain, and also of agricultural implements is still provided for them as well as other Bands in that Province who cultivate land, and they are thereby enabled the better to supply themselves with food.

The Indians of the Lower St. Lawrence, as well as the other bands to whom assistance in provisions and other supplies have usually been sent, have been periodically in the spring and autumn furnished with them; and aid for the most needy among the aged and sick, has also been forwarded for them. Medical treatment is likewise provided for such of them as the Department is informed require it.

NEW BRUNSWICK.

In this Province the assistance to the various bands has been continued, and in some measure increased. But the local supervision having in times past been committed to the hands of no less than fourteen Commissioners and Agents, and with an Indian population only of between twelve and thirteen hundred, and the system not being susceptible of advantageous results to the Indians, and likewise not admitting of that responsibility being exacted from each, which it was necessary to insist upon, the Province has been divided into two Indian Districts with a salaried Superintendent (who has been required to give security for proper performance of duties) to attend to Indian affairs in each. As respects New Brunswick, it was hoped that more progress than has been exhibited would have been perceptible among the Indians, and that a greater desire for education would have manifested itself; but the correspondence with the late Commissioners and Agents indicates a condition almost of stagnation. To remove this, active, and constant supervision is imperatively called for.

NOVA SCOTIA.

The measures adopted under sanction of Order in Council to bring about in this Province an improved system, corresponding in some degree with that which has long prevailed in Ontario, promises material benefit to the Indians. And the reports received from the Local Agents have already opened the way for promoting their welfare, and for rendering them less dependent upon periodical compassionate relief than heretofore. The Agents have been given to understand that substantial assistance would be extended to such as would take up the cultivation of land, as a means of support, and which the want of adequate encouragement to carry on seems to have held them back from attempting, except upon the smallest possible scale.

One drawback which the Indians in Nova Scotia, in common with those of New Brunswick, have experienced, and has been disastrous to them, is the practice which seems to have prevailed, almost unchecked, of any white men who chose to do so, assuming possession of portions of their reserves, and then, by exerting a little influence, contriving before long to have himself placed in the position of a purchaser.

The attention of the officers of Indian Affairs has been directed to the cure of this evil. No white man could be induced to do anything on his property while such insecurity was ever present, and threatening at any hour to dispossess him of it; and, therefore, great allowances should be made for the poor Red men, who are too often begrudged the few limited Reserves which they are permitted to call their own. The issue of the proclamation by which the Legislative enactments for preventing unauthorized occupation of Indian lands have been made applicable to Indian Reserves in Nova Scotia, will, it is trusted, protect them to a very considerable extent in future. And already is there evidence that confidence on the part of the Indians has increased, as respects the management of their affairs.

BRITISH COLUMBIA.

The very large Indian population of that Province, amounting to not less than 45,000 individuals, a proportion of whom are in various stages of semi-civilization, and another portion who have advanced but little, if at all, beyond the condition of Indian life, such as

exists where intercourse with white men has been of a description neither to elevate the race, or to have for its object the imparting to individual members of it objects and aims of an order higher than those which influenced and guided them in their pristine condition, presents a wide field for energetic action, for zealous work on an extended scale; and for rendering these Indians, who, in point of numbers are formidable, eventually attached and valuable subjects of the Crown.

In endeavoring to arrive at a knowledge of what has been done for the benefit of the Indians of that new Province of the Dominion, it would seem that the pioneers in the important work of instructing them in the rudiments of education, and in reclaiming them from heathenism, were the Church Missionary Society, and the Society for Propagating the Gospel in Foreign parts. These Societies, which are indentified with the Church of England, have four principal Missions, as the chief centres from which their operations for educating and christianizing the Indians are conducted. The Roman Catholic Church, also, has been actively engaged, through its Missionaries, in instructing and improving the Indians. Among other efforts made for their benefit, is the establishment of an Industrial and Agricultural School, and it would appear that its effort has been to encourage, in some settlements, successful farming, but of course in a limited degree. There may be other religious denominations who have acted in the same praiseworthy manner; but, if so, no report explaining or making known the labors in which they have been engaged has been received at this office. The Indians of British Columbia have, it would seem from an official report, received upwards of 40 reserves, and averaging in contents from 100 to 200 acres.

The work of organization and the introduction of an Indian policy and system, has yet to be commenced; but the Bill about to be brought before Parliament, will, by making the Acts relating to Indian Affairs in other Provinces of the Dominion, applicable to this new province, and by the passage of the additional provisions which it contains, afford an excellent means of conducting Indian Affairs in British Columbia in a manner more consistent with the welfare and interests of the Indians, than from the information which has reached the Department, the description of management heretofore pursued, has apparently admitted of. The complaint has come from more than one quarter that they have been deprived of portions of their reserves, and it is inferred that redress has been, with them, difficult to obtain. The recurrence of such events will be prevented when the Act which has been prepared becomes law, and the boundaries of their Reserves are properly defined.

We must not, however, close our eyes to many difficulties which will have to be met, and many contingencies, at present unforseen, will require to be provided for hereafter.

The great point will be to begin right, and, although, for so extended a region the Local Staff available may not be adequate to the occasion, and the working of the laws and regulations hitherto unknown there may be attended with hindrances and inconveniences which will impede progress, yet the Indians will doubtless soon comprehend that their affairs are to be administered in such a manner that whatever rights and privileges are possessed by people of other origins, will be secured to them; and that on their part, by conforming to the laws enacted for their benefit, they will enable the Government the better to protect their interests.

It is trusted that previously to the period for issuing another official report on Indian Affairs, some progress will have been made in forming plans, and also in carrying them out, for promoting the material welfare of the Indians of British Columbia.

POPULATIONS.

Upon comparing the population returns with those of the last year for the Provinces of Ontario and Quebec, it will be observed that some bands, more or less numerous, now appear for the first time in the Appendix to the annual report. This is to be accounted for by the fact, that the decennial census has, through the agency of the persons who collected the data for it, disclosed the existence of different parties of Indians, which were unknown to the Visiting Superintendent or other agents of the Department. These parties of Indians not being recipients of annuities or interest money, had no inducements to

report themselves to officers or others connected with Indian Affairs. The population returns to be found in the Appendix exhibit, it will be perceived, as regards most of the bands, an increase and not a diminution in numbers; and, on comparing these with former returns, it will be found to have been continuous. This is doubtless the result of improved habits of life, proper medical treatment when sickness has occurred, better habitations and sufficient clothing, better food, and an ample supply of it. Added to these, may be the restraints their religious instructors inculcates, and the better tone of mind which, in many, is observable. There are now fewer complaints of the commission of crime, and when we do hear of it, it is usually traceable to unsubdued habits, or instances of intemperance. There can be little doubt that the good influences at work, are rendering the Indians better members of society.

With respect to the population returns for Manitoba and the North-West Territories, no census having yet been completed, the computation of their numbers is necessarily uncertain.

In regard to British Columbia, the information obtained by the Department is very imperfect, and it will be perceived that there are several bands, the population of which was entirely unknown.

It is trusted, that previously to the issue of another Annual Report, such additional information will have been collected as to furnish ample details in connection with all the important Bands.

It now only remains for me to state, in conclusion, that upon the whole the various superintendencies and agencies of the Department have been satisfactorily conducted, and that the Staff at Head-quarters have given a steady and praisworthy attention to their duties, which, on reference to the proper tabular statement will convincingly prove, have become increasingly onorous, and which entail responsibilities inseparable from the varied and special nature of much of the work to be performed and little understood by those not intimately conversant with them, and demanding an amount of time and attention considerably in excess of any former years.

I have the honor to be, Sir,

Your obedient servant,

WM. SPRAGGE,

D. S. G. A.

RETURN A.

Of Officers and Employés of the Indian Branch, Department of the Secretary of State for the Provinces, for the Year ending the 30th June, 1871.

Designation.	Name.	Salary per annum.	When Appointed.	By whom Appointed.	Date of first Appointments to Provincial Service.	REMARKS.
		$ cts.				
Superintendent General	Hon. Joseph Howe..	Nil.	Nil.	Nil.	Nil.	Holds that Office combined with that of Secretary of State for the Provinces.
Deputy Superintendent.....	William Spragge....	2,100 00	17th Mar., 1862	Govr. in Council..	1st Jan., 1829	In Surveyor General's Department.
Accountant.....	Chas. T. Walcot....	1,400 00	1st Dec., 1859	Governor General and O.C., 17th Mar., 1862.....	— Oct, 1854	In Crown Land Department.
Corresponding Clerk	Lawr. Vankoughnet.	1,100 00	13th Feb., 1861	do do	13th Feb., 1861	
Cler and Draughtsman.....	J. P. M. Lecourt...	900 00	10th Apl., 1862	Hon. A. Campbell.		
Clerk	S. G. Murray.....	800 00	1st June, 1866	do	.....	Appointed by Sir John Colborne Forest Warden, Township of Tyendinaga, retired on pension, paid to 18th Feby., 1871.
Clerk and Translator.....	J. V. DeBoucherville	850 00	1st Jan., 1869	Sir E. P. Taché...	.....	In Registrar's Branch of Department of Secretary of State for Canada.
Probationary Clerk	Frederick Smith....	300 00	-- Oct., 1870	Hon. Jos. Howe..	1st May, 1865	Appointed Third Class Clerk, at $400 per annum, 1st October, 1871. O.C., 13th October, 1871.

C. T. WALCOT,
Accountant, Indian Affairs.

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
Indian Branch, Ottawa, 25th April, 1872.

RETURN B.

SCHEDULE of Salaries paid, and Allowances and Payments made to individuals of the Indian Branch, Department of the Secretary of State for the Provinces, during the year ended 30th June, 1871, for Services at the Outposts and Stations.

Local Superintendency Division.	Names of Recipients of Payments.	Nature of Office or Service.	Amount Paid. $ cts.	For what period paid.	Out of what Fund Paid.	Authorities of Appointment.	Date of Appointm't.	Remarks.
Eastern Superintendency Ontario.	W. R. Bartlett	V. S. and Comr.	1372 00	1st April, '70, to 31st Mar. '71..	Ind. Land Mang't	Governor General...	1st July, '58	Stationed at Toronto.
	A. Deacon.....	Clerk	592 00	1st April, '70, to 31st Dec., '70..	do do	Supt. General	1st July, '64	do
	Charles Irvine	School Teacher..	150 00	1st July, '70, to 31st Mar. '71..	Mohawks of the Bay Q.	Nominated by Band and app'd by Dept	1st July, '70	
	Rev. G. A. Anderson	Missionary	75 00	1st April, '70, to 16th May, '70.	do do	Governor General...		
	Rev. T. Stanton	"	350 00	16th May, '70, to 31st Mar. '71..	do do	Supt. General	16th May, '70	
	Miss Lydia Hill	School Teacher..	100 00	1st April, '70, to 31st Mar. '71 .	do do	Nominated by Band and app'd by Dept	1st April, '70	
	do	do Mohawk R've	15 00	1st April, '70, to 30th June, '70.				
	Geo. Charles.....	Chief	50 00	1st April, '70, to 31st Mar. '71 .	Chippewas of Snake I'd	do do		
	William Law.....	School Teacher..	50 00	do do	do do	do do	do	do
	Miss Eliz. Tilley....	"	100 00	do do	Chippewas of Beausolve	do do	do	do
	John Assance.....	Chief	50 00	do do	do do	do do	do	do
	David Assance	Interpreter	25 00	do do	do do	do do	do	do
	Thos. Naningishkung	Chief	25 00	do do	Chippewas of Rama...	do do	do	do
	J. B. Naningishkung	Chief and Interp	50 00	do do	do do	do do	do	do
	Rev. J. L. Saunders.	For Sc'l Teacher	50 00	do do	do do	do do	do	do
	Dr. H. Corbett	Medical Attdt..	100 00	do do	do do	do do	do	do

RETURN B.—*Continued.*

Local Superintendency or Division.	Name of Recipients of Payments.	Nature of Office or Service.	Amount paid. $ cts.	For what period paid.	Out of what Fund paid.	Authorities of Appointment.	Date of Appointm't.	Remarks.
Eastern Superintendency Ontario.	John Kadahgegwon.	Chief	100 00	1st April, '70, to 31st March, '71	Chippewas of Saugeen.	Nominated by Band and app'd by Dept	1st April, '70	
	Henry H. Madwaosh	"	100 00	do do	do do	do do	do	
	Jos. K. James	Councillor	10 00	do do	do do	do do	do	
	John George.....	Church Sexton..	40 00	do do	do do	do do	do	
	Cephas Kahbege	Interpreter	12 50	1st April, '70, to 30th June, '70.	do do	do do	do	
	Geo. Hall	School Teacher..	200 00	1st April, '70, to 31st May, '71.	do do	do do	do	
	Doctor Frickleton...	Surgeon	152 05	27th June to 31st March, 1871 ..	do do	do do	do	
	Henry S. Jones.....	Interpreter	150 00	1st July, '70, to 31st March, '71	do do	do do	do	
	Geo. A. Tabigwon ..	Chief	50 00	1st April, '70, to 31st May, '71 .	Chippewas of Nawash.	do do	do	
	Wm. McGregor.....	"	100 00	do do	do do	do do	do	
	F. Lamorandere	Interpreter	100 00	do do	do do	do do	do	
	David Craddock	School Teacher..	200 00	do do	do do	do do	do	
	John Rice	Secretary.....	20 00	do do	Miss. of Rice & Mud L	do do	do	
	Jos. Whetung.	Chief	25 00	do do	do do	do do	do	
	R. Pandaush	Messenger.....	5 00	do do	do do	do do	do	
	Jacob Jacobs	"	5 00	1st April, '70, to 30th Sept., '70.	do do	do do	do	
	Alfred McCue	"	5 00	1st Oct., '70, to 31st May, '71 .	do do	do do	do	
	John Johnson	Chief	50 00	1st April, '71, to 31st March, '71	Miss. of Skugog.....	do do	do	
	Dr. W. Noden.....	Medical Attdt ..	150 00	do do	Miss. of Alnwick	do do	do	
	John Sunday, Senr..	Chief	112 00	do do	do do	do do	do	

	Geo. Blaker	Councillor	12 00	do	do	do	do	do	do	do		
	Peter Crow	"	12 00	do	do	do	do	do	do	do		
	Thos. Marsden	"	12 00	do	do	do	do	do	do	do		
	William Crow	"	12 00	do	do	do	do	do	do	do		
	John Sunday, Jr.	Secretary	48 00	do	do	do	do	do	do	do		
	Rev. J. A. Iveson	Forsexton&wood	30 00	do	do	do	do	do	do	do		
Western Superintendency	Robert McKenzie	V. S. and Comr.	980 00	1st April, '70 to 31st March, 71		Ind. Land Manag't		Supt. General		10th Feb. '65	Stat'd at Sarnia.	
	Rev. A. Jamieson	Missionary	400 00	do	do	do	do	Governor in Council		5th June, '45	do	Walpole I.
	Rev. H. P. Chase	"	400 00	do	do	do	do	do	do	1st Jan., '65	do	Carradoc.
	Jos. Wancaush	School Teacher	200 00	do	do	Chippewas of Thames		Nominated by the		Band and ap	p'd by Department	
	Jos. Fisher	"	200 00	do	do	do	do	do	do	do	do	do
	John Henry	Interpreter	100 00	do	do	do	do	do	do	do	do	do
	Peter Brigham	Messenger	30 00	1st Oct., '69, to 30th Sep., '70		do	do	do	do	do	do	do
	S. Maskinonge	"	30 00	do	do	do	do	do	do	do	do	do
	John Week	Messenger, Bear Creek	7 00	1st April, '70, to 30th Sep., '70		do	do	do	do	do	do	do
	John Henry	Councillor	12 00	1st Oct., '69, to 30th Sep., '70		do	do	do	do	do	do	do
	Joseph Wancash	"	12 00	do	do	Chippewas of Thames		do	do	do	do	do
	Joseph Fisher	"	12 00	do	do	do	do	do	do	do	do	do
	Joshua Wawanosh	Chief	250 00	1st April, '70, to 31st May, '71.		do	of Sarnia	do	do	do	do	do
	Wm. Wawanosh	School Teacher and Interpreter	225 00	do	do	do	do	do	do	do	do	do
	James Cameron	School Teacher	100 00	do	do	Chippewas of Walpole.		do	do	do	do	do
	W. N. Fisher	Councillor and Interpreter	70 00	do	do	do	do	do	do	do	do	do
	Jno. Natahwosh	Councillor	10 00	do	to 30th Sept., '70	do	do	do	do	do	do	do
	Thos. Buckwheat	"	10 00	do	do	do	do	do	do	do	do	do
	Joshua Greenbird	"	20 00	do	to 31st Mar., '71	do	do	do	do	do	do	do

RETURN B.—*Continued.*

Local Superintendency or Division.	Names of Recipients of Payments.	Nature of Office or Service.	Amount paid. $ cts.	For what period paid.	Out of what Fund paid.	Authorities of Appointment.	Date of Appointm't.	Remarks.
Western Superintendency	Chas. Kujoshk.....	Councillor.....	10 00	1st Oct., '70, to 31st May, '71.	Chippewas of Walpole.	Nominated by Band	and app'd by	the Department.
	John C. Bryson.....	School Teacher..	300 00	1st April, '70, to 31st March, '71	Moravians of Thames.	do do	do	do do
	Representatives of late Philip Jacob..	Chief.	50 00	1st April, '70, to 30th Sept., '70.	do do	do do	do	do do
	Frederick Jacob.....	"	50 00	1st Oct., '70. to 31st Mar., '71.	do do	do do	do	do do
	Joshua Jacob.....	Councillor	6 00	do do	do do	do do	do	do do
	C. M. Stonefish.....	"	6 00	do do	do do	do do	do	do do
	Josh. Pheasant.....	"	6 00	do do	do do	do do	do	do do
	Jos. H. Crowley ...	School Teacher..	250 00	1st April, '70, to 31st Mar., '71.	Wyandotts of Anderdon	do do	do	do do
	Dr. W. Lambert....	Medical Attd...	80 00	do do	do do	do do	do	do do
Grand River Superintendency	J. T. Gilkison	V. S. and Comr.	1372 00	do do	Six Nations of G. R. & Ind. L. Mangt. Fund	Supt. General	1st May, '62	
	Henry Andrews.....	Clerk.....	784 00	do do	do do	Gov. General	1st Jan., '55	
	R. H. Dee, M.D....	Medical Attd....	1500 00	do do	Six Nations G. R	Nominated by Band	and app'd by	the Department.
	W. McCargo, M.D..	"	280 00	do do	do do	do do	do	do do
	G. H. Johnson.....	Interpreter.....	400 00	do do	do do	do do	do	do do
	Jas. McLean.....	Warden.....	200 00	do do	do do	do do	do	do do
	David Hill.....	Caretaker	20 00	do do	do do	do do	do	do do
	Geo. King	Chief.....	100 00	do do	Mississaguas of Credit.	do do	do	do do
	Jas. Chechock	Messenger.....	50 00	do do	do do	do do	do	do do
	Thos. Pyne, M.D ...	Medical Attd...	200 00	do do	do do	do do	do	do do
	James McLean	Warden	100 00	do do	do do	do do	do	do do

	James A. Wood	School Teacher..	250 00	do	do	do	do	do	do	do	do	do
	Alfred A. Jones.....	" ..	229 17	1st May, '70, to 31st May, '71.		do	do	do	do	do	do	do
	Fred: Takwah	Sexton.....	25.00	1st April,	do	do	do	do	do	do	do	do
Northern Superintendency	W. Plummer.....	V. S. and Comr.	1176 00	do	do	Indian Land Mangt...		Supt. General.....		18 May, '68.		
	McGregor Ironside..	Clerk	715 44	do	do	do	do	do	do	5 Aug., '63.		
	Thos. Simpson, M.D.	Medical Attd...	1000 00	do	do	do	do	do	do	1 April, '67.		
	Rev. Jos. Jennesseaux and Assist...	School Teachers.	300 00	do	do	do	do	Governor General...		22 Oct., '59.		
	Rev. J. Sims and Mr. Birkett.....	School Teacher..	200 00	do	do	do	do	do	do			
	John Davidson.....	Agent for Indian Land, Sault St. Marie.....	500 00	do	do	do	do	Supt. General.....		1 April, '70.		
Lower Canada..	Rev. F. Boucher....	R. C. Missionary	225 96	do	to 30th June, '70.....	L. Canada Ind. Fund.		Governor General.				
	Rev. F. Marcoux....	"	50 83	do	to 31st Mar., '71.....	do	do	do	do			
	Rev. Jos. Maurault..	"	225 96	do	to 30th June, '70	do	do	do	do	.....	Dead.	
	Thos. White.....	School Teacher..	37 50	1st July,	to 30th Sept., '70.....	do	do	Supt. General.....		1 April, '67.	River Desert Indians. Mr. White having left the school, this Quarter's salary was paid to these ladies, they having performed Mr. White's duties.	
	Sisters Gertrude & Margaret Mary....	" ..	37 50	1st April, '70,	to 31st May, '71.	do	do	do	do			
	Mrs. M. J. Powell .	" ...	200 00	do	do	do	do	do	do	8 May, '65.		
	Simon Assance.....	" ..	100 00	do	do	do	do	do	do			
	E. R. A. Fletcher...	" ..	200 00	do	do	do	do	do	do	10 Jan., '70.		
	Mrs. E. R. A. Fletcher....	" ..	100 00	do	do	do	do	do	do	do		
	H. J. Martin, M.D..	Medical Attd...	100 00	1st May, '70,	to 3rd May, '71..	do	do	do	do	O. C., Dec., '69.		
	Dr. Wm. Wakeham.	" ..	73 33	1st April, '71,	to 31st May, '71..	do	do	do	do	O.C.22 Ap70		
	Miss Connelly	School Teacher..	150 00	do	do	do	do	do	do	O. C., do	Golden Lake Indians.	
	Rev. Jos. H. Leonard	for " " ..	150 00	do	do	do	do	do	do	.....	Mission Point Indians.	
	Rev. A. Audet	for " " ..	150 00	do	do	do	do	do	do	.....	Indians of Maria.	

Department of the Secretary of State for the Provinces,
Indian Branch, Ottawa, 25th April, 1872.

RETURN C.

STATEMENT of Special Payments, Contingent and Incidental Expenditure by the Indian Branch, Department of the Secretary of State for the Provinces, during the year ending 30th June, 1871, out of Upper Canada Funds.

Station, Superintendency, or Division.	Character of Disbursements.	Amount paid.	Out of what Fund paid.
		$ cts.	
Head Quarters.....	F. Talfourd, retired Allowance	400 00	Ind. Land Magt. Fund.
	H. Bernard, Salary as Solicitor.....	400 00	" "
	Travelling Expenses	1,060 29	" "
	Percentage on Receipts.....	101 06	" "
	Purchase of Oxen.....	270 00	" "
	Grand Chief Oshaweeno	25 00	" "
	Medicines	333 33	" "
	Advertising.....	144 39	" "
	Stationery, Printing, &c.....	61 93	" "
	Wharf, Manitowaning	473 36	" "
	Sundries, Rent, Telegrams, Postages, &c., &c.....	1,529 37	" "
	Surveys, Roads	7,019 90	" "
	Transfers to other Accounts	151 00	" "
	Gratuities	90 00	" "
	Salaries, Extra Services	402 08	" "
	Improvements on lot in Anderdon	216 00	" "
	Blankets	1,300 00	" "
Western Superintendency	Medicines, Attendance, Funerals, Coffins, &c., per Registration of Tribe.....	556 60	Chippewas of Sarnia.
	Schools Books	7 09	" "
	Allowances to Chapel Steward and Messenger	70 00	" "
	Pensions.....	200 00	" "
	Surrender paid to the two Wawanoshes	525 00	" "
	Improvements paid to Abram Oamah-sono	500 00	" "
	Distribution	5,787 09	" "
	Percentage on land Receipts.....	719 88	" "
	Road Work, and Bridges.....	713 27	" "
	Expenses *re*-Collection of Timber....	40 00	Chippewas of Walpole.
	Percentage on land Receipts.....	227 00	" "
	Distribution	2,611 30	" "
	Pensions.....	40 00	Chippewas of Thames.
	Coffins	71 00	" "
	Percentage on land Receipts.....	46 58	" "
	Distribution	2,669 88	" "
	Distribution	136 54	Munsees of Thames.
	Refunds	66 68	Moravians "
	Percentage on land Receipts.....	1,049 31	" "
	Distribution	5,721 29	" "
	Percentage on land Receipts.....	143 67	Wyandots of Anderdon.
	Distribution	2,576 30	" "
	Interest on Investment.....	101 91	Wm. Wabbuck.
	" "	76 43	James Menace.
	" "	127 38	Nancy Maiville.
	Percentage on land Receipts.....	4 89	Pottawattamies of Walpole Island.
	Distribution	100 95	
Central and Eastern Superintendency.....	Vaccination.....	31 00	Chippewas of Beausoleil.
	Transfer.....	62 82	" "
	Percentage on land Receipts.....	144 65	" "
	Distribution	1,949 72	" "
	Pensions.....	40 00	Chippewas of Saugeen.
	Roads, Inspection of	2,498 65	" "

RETURN C.—Statement of Special Payments, Contingent, &c.—*Continued.*

Station, Superintendency, or Division.	Character of Disbursements.	Amount paid.	Out of what Fund paid.
		$ cts.	
Central and Eastern Division.....	Improvements	12 50	Chippewas of Saugeen.
	Refunds.....	25 00	"
	Transfer.....	682 58	"
	Fishery License.....	10 00	"
	Percentage on land receipts.....	705 77	"
	Distribution	8,559 05	"
	Pensions.....	102 00	Chippewas of Na was h.
	Roads, inspection of.....	2,498 66	"
	Improvements	12 50	"
	Refunds.....	25 00	"
	Transfer.....	777 94	"
	Percentage on land receipts.....	1,177 47	"
	Distribution	10,273 30	"
	Ploughs	80 00	Chippewas of Rama.
	Transfer.....	64 75	"
	Percentage on land receipts.....	109 03	"
	Distribution	2,042 83	"
	Transfer.....	30 57	Chippewas of Snake Island
	Percentage on land receipts.....	28 18	"
	Distribution	923 38	"
	Rents paid to individual Indians.....	2,488 50	Mohawks of the Bay of Quinte.
	Expenses leasing lands	101 50	"
	" Forest Bailiff.....	40 00	"
	" Synod	60 00	"
	Transfer.....	54 85	"
	Services of Sexton.....	26 00	"
	Travelling Expenses, S. Green and others.....	52 50	
	Insurance	39 40	
	Gratuity, C. Smart.....	10 00	"
	Percentage paid F. McAnnany and W. Frizzell	341 08	"
	Percentage on land receipts.....	311 36	"
	Distribution	6,935 16	"
	Repairs of School House.....	45 60	Mississaguas of Alnwick.
	W. H. Eyre, for Searches.....	18 45	"
	Refund.....	5 00	"
	Percentage on land receipt.....	83 95	"
	Distribution	3,800 31	"
	Percentage on land receipts.....	1 65	Mississaguas of Scugog.
	Distribution	451 96	"
	Account repayment of loan to build Church.....	62 00	Mississaguas of Rice and Mud Lakes.
	Distribution	2,640 48	
Grand River Superintendency	Travelling expenses, Simcoe Kerr....	36 25	Six Nations of the Grand River.
	House Rent.....	125 00	"
	Pensions	350 00	"
	Expenses Queen's Birthday.....	66 49	"
	Repairs to bridges.....	332 35	"
	Fire losses.....	185 00	"
	Repairs to Mohawk Church.....	100 00	"

RETURN C.—Statement of Special Payments, Contingent, &c.—*Continued.*

Station, Superintendency, or Division.	Character of Disbursements.	Amount paid.	Out of what Fund paid.
		$ cts.	
Grand River Superintendency	Contingencies	249 80	Six Nations of the Grand River.
	Boy Peters	99 72	" "
	Transfers	1,017 81	" "
	Presentation of Royal Portraits	154 39	" "
	Stationery	41 00	
	Law costs, Fagan *vs.* McLean and *re* trial of Stewart	350 80	" "
	Expenses *re* Timber	725 02	" "
	Improvements Winterbottam and Anthony	350 00	" "
	Insurance	12 50	" "
	Chiefs' board money	800 00	" "
	Burial Expenses	20 00	" "
	Expenses of Delegates	494 57	" "
	Percentage on land Receipts	1,698 05	" "
	Distribution	40,628 63	" "
	Pensions	225 00	Mississaguas of the Credit
	Sundries for Tribe	280 27	" "
	Paints and Painting Parsonage	87 30	" "
	Contingencies	33 76	" "
	Gratuities	50 00	" "
	Account loan, Jas. McLean	100 00	" "
	Percentage on land Receipts	64 47	" "
	Distribution	4,537 67	" "
Northern Superintendency	Distribution	203 20	Ojibewas of Lake Huron Shawanega Band.
	"	42 20	" Chief Dokis & his Band
	"	2,259 87	" of Lake Huron.
	"	2,086 51	" of Lake Superior.
Cornwall Superintendency	Chiefs' yearly Allowance	50 00	Iroquois of St. Regis.
	Fuel wood for school	24 00	" "
	Distribution	2,728 65	" "
Northern Superintendency	Percentage on land Receipts...	271 42	Batchewana Indians.
	Transfer	101 50	" "
	Refunds	19 00	" "
	Distribution	202 47	" "
Lake Two Mountaius Superintendency	Percentage on land Receipts	6 00	Lake of Two Mountains Indians.
	Transfers	330 00	" "
	Distribution	117 63	
Albert Anthony	Balance of Account	654 87	Albert Anthony.
St. Francis	T. Plamondon Percentage	27 52	Abenakis of St. Francis.
"	Distribution	264 83	" "
Isle Verte and Vigio	"	453 50	Amalacites of Isle Verte and Vigio.
Peach Island	Transfer	450 02	
Manitoulin Island	Refund	300 00	General Fund, P. A.
	"	130 00	Genl. Fund, Prov. Acc.
Garden River	Transfer	7 00	" "
	Percentage on land Receipts	127 91	Garden River Indians.
Caughnawaga Eastern Division	Distribution	131 86	" "
	Services of Missionary	217 35	Iroquois of Caughnawaga.
	Distribution	1,787 15	" "
	Transfers	38 60	" "
	Repairs to roads, &c	200 00	" "
Western Superintendency	Education and Board	,346 25	Indians Schools.
	Work Shops	250 00	"

RETURN C.—Statement of Special Payments, Contingent, &c.—*Continued.*

Station, Superintendency, or Division.	Character of Disbursements.	Amounts paid.	Out of what Fund paid.
		$ cts.	
Western Superintendency.....	Salaries (in part).....	82 50	Indian Schools.
	Insurance	92 60	"
Lake Huron Indians on Mississagua River....	Percentage on land receipts.....	24 75	Lake Huron Indians on Mississagua River.
Lake Nipissing.....	Percentage on land receipts.....	22 90	Lake Nipissing Indians.
	Distribution	287 50	"
Manitoulin Island.....	Improvements	20 00	Ojibewas and Ottawas of Manitoulin Island.
	Refunds.....	77 50	"
	Transfers	151 59	"
	Percentage on land receipts.....	305 43	"
	Distribution	628 50	"
River Desert.....	Percentage on land receipts.....	305 43	River Desert Indians.
"	Distribution	824 83	"
Thessalon River.....	Percentage on land receipts.....	5 61	Thesalon River Reserve.
White Fish River.....	Percentage on land receipts.....	5 62	White Fish River Reserve.
Fort William, Lake Superior.....	Percentage on land receipts.....	7 80	Fort William and, Lake Superior.
Upper Ottawa.....	Percentage on land receipts.	30 40	Nipissingues, Algonquins, and Ouataouais, of the Upper Ottawa.

RETURN D.

STATEMENT of Sums paid out of the Lower Canada Indian Fund, during the year ended 30th June, 1871.

Station, Superintendency, or Division.	Character of Disbursements.	Amount.
		$ cts.
Lower Canada.....	Sundry Roman Catholic Missionaries	485 77
do do	Grant to Maniwaki Road	1,000 00
do do	do in aid of Schools and salaries of Teachers	1,512 50
do do	Salaries and services of Medical Attendants	148 33
do do	Purchase of Lands in South Algona	156 10
do do	Advertising	23 56
do do	Gratuities, Karoniahasi and Widow, Nipissing	25 00
do do	Grants to relieve distress	1,990 00
do do	Roman Catholic Missions	500 00
do do	Vaccination	565 00
do do	J. B. A. Chamberland, professional services	5 00
do do	Services to Durham Lands and Indian Land Quarries.....	272 89
do do	Repairs to Church, Caughnawaga.....	500 00
do do	Per centage	104 85
do do	Travelling Expenses	415 95
do do	Tribal Expenses, Abenakis of St. Francis	55 00
do do	Seed Grain	2,175 00
do do	Peter Basket, expenses to Restigouche Indians	25 00
		$9,959 95

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
INDIAN BRANCH, OTTAWA, April 25th, 1872.

E.—STATEMENT of Special Payments, Contingent and Incidental Expenditure, by the Indian Branch, Department of the Secretary of State for the Provinces, during the year ending 30th June, 1871, out of the Nova Scotia and New Brunswick Funds.

Station, Superintendency or Division.	Character of Disbursements.	Amount Paid.	Out of what fund payable.	
		$ cts.		
New Brunswick...	Salary, Rev. J. J. O'Leary	100 00	New Brunswick, Ind.	
,, ...	,, Rev. J. C. McDevitt	250 00	,,	,,
,, ...	,, Chas. Meahan	112 50	,,	,,
,, ...	Sundry accts., Supplies, Seeds, and Medicines, G. Thompson	252 88	,,	,,
,, ...	Medical Bills	40 00	,,	,,
,, ...	Plans &c., Dep. Surveyor General Inches	40 00	,,	,,
,, ...	Travelling Expenses	20 00	,,	,,
,, ...	Statistics, Indians, Co. Victoria	25 00	,,	,,
,, ...	Relief &c., for Indians, Co. Victoria	255 00	,,	,,
,, ...	,, ,, Carlton	100 00	,,	,,
,, ...	,, ,, Kent	190 00	,,	,,
,, ...	,, ,, York	160 00	,,	,,
,, ...	,, ,, Westmoreland	230 00	,,	,,
,, ...	,, ,, Northumberland	230 00	,,	,,
,, ...	,, ,, Restigouche	100 00	,,	,,
,, ...	,, ,, Gloucester	80 00	,,	,,
,, ...	,, ,, Charlotte	30 00	,,	,,
,, ...	,, ,, St. John City	110 70	,,	,,
Nova Scotia	Seed Grain	600 00	Nova Scotia, Indian.	
,, ...	Relief Sick Indians	76 90	,,	,,
,, ...	Blankets	700 00	,,	,,
,, ...	Sick and Indigent	450 00	,,	,,
,, ...	Medical Services	167 00	,,	,,
,, ...	Vaccination	19 50	,,	,,
,, ...	Salaries	100 00	,,	,,
,, ...	Travelling Expenses	128 50	,,	,,
,, ...	Grant; Merigomishe Indians	80 00	,,	,,
,, ...	Relief &c., Indians, District No. 1	196 80	,,	,,
,, ...	,, ,, 2	213 20	,,	,,
,, ...	,, ,, 3	274 70	,,	,,
.....	,, ,, 4	159 90	,,	,,
,, ...	,, ,, 5	229 60	,,	,,
,, ...	,, ,, 6	278 80	,,	,,
,, ...	,, ,, 7	151 70	,,	,,
		$6,151 98		

$2,325.38

$3,826.60

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
INDIAN BRANCH, OTTAWA, 25th April, 1872.

F.—STATEMENT and Condition of the Indian Fund, showing the Balance at the Credit thereof on the 1st July, 1870, the Receipts and Payments during the year ended 30th June, 1871, and the Credit Balance at the date last mentioned.

Tribe or Fund.	Credit Balances, 1st July, 1870.	Receipts.				Expenditure.			Credit Balances, Constituting Invested Funds and Commuted Annuities, &c., &c.
		Land, Timber, &c.	Interest on Invested Funds: Commutation of Annuities, Grants, &c.	Transfers.	Total.	By Warrants.	By Transfer.	Total.	
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Albert Anthony	7 54	.....	.....	647 33	647 33	654 87	.....	654 87	.....
Abenakis of St. Francis	303 01	520 17	10 30	.....	530 47	292 35	.....	292 35	541 13
Amalacites of Isle Verte and Viger	59 35	726 15	30 59	.....	756 74	.....	.....	.....	816 09
Batchewana Indians	3,041 62	2,714 27	253 62	2,106 11	5,074 00	221 47	372 92	594 39	7,521 23
Beausoliel Indians	43,891 92	1,446 52	2,761 02	.....	4,207 54	2,155 72	144 65	2,300 37	45,799 09
Chippewas of the Thames	68,048 27	480 85	4,183 20	.....	4,664 05	3,384 38	46 58	3,430 96	69,281 36
Chippewas of Saugeen	181,902 10	6,791 13	10,441 93	.....	17,233 06	11,909 75	705 77	12,615 52	186,519 64
Chippewas of Sarnia	132,114 87	7,484 49	7,780 15	.....	15,264 64	8,938 05	719 88	9,657 93	137,721 58
Chippewas of Nawash	214,235 70	11,408 14	12,248 50	.....	23,656 64	13,361 94	1,177 47	14,539 41	223,352 93
Chippewas of Walpole	52,605 53	2,270 00	3,190 85	.....	5,460 85	2,881 30	227 00	3,108 30	54,958 08
Chippewas of Rama	46,792 46	1,090 49	2,913 22	.....	4,003 71	2,347 83	109 03	2,456 86	48,339 31
Chippewas of Lake Island	21,445 06	281 77	1,334 19	.....	1,615 96	1,083 38	28 18	1,111 56	21,949 46
Chief Dookis and his Band	541 82	.....	27 62	.....	27 62	.....	.....	.....	569 44
Durham Indians	641 97	.....	35 64	.....	35 64	.....	.....	.....	677 61
General Fund, Provisional Acc'nt.	1,902 96	2,070 00	109 16	.....	2,179 16	430 00	17 00	447 00	3,635 12
Garden River Indians	2,390 44	1,279 16	123 08	.....	1,402 24	131 86	127 91	259 77	3,532 91
Iroquois of St. Regis	30,790 89	2,947 71	1,822 52	.....	4,770 23	4,551 59	.....	4,551 59	31,009 53
Iroquois of Caughnawaga	1,420 01	1,833 54	104 43	330 00	2,267 97	2,204 50	38 00	2,242 50	1,445 48
Indian Schools	41,992 24	33 50	2,307 97	.....	2,341 47	2,804 85	.....	2,804 85	41,528 86
Indian Land Management Fund	195,225 82	241 44	12,215 31	7,752 88	20,209 63	22,518 27	151 00	22,669 27	192,766 18
Lower Canada Indians	120,841 93	326 00	6,473 26	.....	6,804 26	9,959 95	.....	9,959 95	117,686 24
Lake of Two Mountains Indians	843 17	60 00	38 09	33 00	131 09	117 63	336 00	453 63	520 63
Lake Huron Indians on Mississaga River	477 28	247 58	29 94	.....	277 52	.....	24 75	24 75	730 05
Lake St. John Indians	846 50	.....	43 12	.....	43 12	.....	.....	.....	889 62
Lake Nipissing Indians	1,810 42	229 00	91 00	.....	320 00	287 50	22 90	310 40	1,820 02
Moravians of the Thames	122,644 65	10,346 85	6,660 26	.....	17,007 11	6,205 97	1,049 31	7,255 28	132,396 48
Mississaguas of the Credit	115,163 08	812 57	6,983 40	.....	7,795 97	6,268 17	77 29	6,345 46	116,613 59
Mohawks of the Bay of Quinté	94,010 38	7,643 53	5,693 70	.....	13,337 23	10,834 14	311 36	11,145 50	96,202 11
Mississaguas of Alnwick	73,783 70	999 50	4,596 15	.....	5,595 65	4,257 36	83 95	4,341 31	75,038 04
Mississaguas of Skugog	9,895 01	16 50	599 61	.....	616 12	501 96	1 65	503 61	10,007 51

Mississaguas of Rice and Mud Lakes	53,510 58		3,358 66		3,358 66	2,762 48		2,762 48	54,106 76
Munsees of the Thames	2,695 50		135 58		135 58	136 54		136 54	2,694 54
Manace, James	1,519 22		76 44		76 44	76 43		76 43	1,519 23
Maiville Nancy, *alias* Recollet	2,532 04		127 38		127 38	127 38		127 38	2,532 04
Manitoulin Island (unceded)	35 56		1 82		1 82				37 38
Megannattewan and Naiscoutyong Indian Reserves	170 67	62 00	9 46	151 59	223 05				393 72
New Brunswick Indians	305 29	33 90	2,231 57		2,265 47	2,325 38		2,325 38	245 38
Nova Scotia Indians	2,600 30	100 00	2,524 82		2,624 82	3,826 60		3,826 60	1,398 52
Nishiguanga and his Band	138 25		7 03		7 03				145 28
Ojibewas of Lake Huron	48,094 94		3,041 64		3,041 64	2,505 27		2,505 27	48,631 31
Ojibewas of Lake Superior	40,076 41		2,485 42	101 50	2,586 92	2,086 51	2,106 11	4,192 62	38 470 71
Ojibewas and Ottawas of Manitoulin Island	6,190 10	4,037 48	349 36	17 00	4,403 84	726 00	557 02	1,283 02	9,310 92
Payments in liquidation of J. B. Clench's deficits	847 05		43 17		43 17				890 22
Pottawattamies of Walpole Island	2,660 98		133 87		133 87	100 95	4 89	105 84	2,689 01
River Desert Indians	16,796 17	3,692 97	954 51		4,647 48	1,429 06	308 90	1,737 96	19,705 69
Six Nations of the Grand River	818,215 79	17,029 43	47,580 14	150 00	64,759 57	48,596 52	2,345 38	50,941 90	832,033 46
Serpent River Reserve	152 21		7 76		7 76				159 97
Spanish River Indians	1 35		0 06		0 06		1 41	1 41	
Tetomonais (Chief) and his band	989 11		59 56		59 56				1,048 67
Thessalon River Reserve	508 76	56 13	26 29		82 42		5 61	5 61	585 57
Wyendotts of Anderdon	49,834 22	1,931 50	2,685 53		4,617 03	2,906 30	143 67	3,049 97	51,401 28
Wabbuck, William	2,025 63		101 92		101 92	101 91		101 91	2,025 64
White Fish River Reserve	158 60	56 20	9 04		65 24		5 62	5 62	218 22
(Fort) William Band	170 82	77 99	11 09		89 08		7 80	7 80	252 10
Nipissingues, Algonguins, and Opatouais of the Upper Ottawa		304 00	10 38		314 38		30 40	30 40	283 98
Hurons of Lorette		324 71	6 67		331 38				331 38
Total	$2,629,899 25	92,007 17	159,086 00	11,289 41	262,382 58	186,012 12	11,289 41	197,301 53	2,694,980 30

C. T. WALCOT,
Accountant, Indian Affairs.

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
INDIAN BRANCH, OTTAWA, 25th April, 1872.

Dr. G.—GOVERNMENT in account with the Indian Department. *Cr.*

		$ cts.			$ cts.
1870. July 1st ...	To amount of Balance	2,629,899 25	1871. June 30th ..	By amount of payments between 1st July, 1870, and 30th June, 1871	197,301 53
1871. June 30th ..	To amount of Receipts from 1st July, 1870, to 30th June, 1871.....	262,382 58	June 30th ..	By amount of Balance.....	2,694,980 30
		$2,892,281 83			$2,892,281 83

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
INDIAN BRANCH, OTTAWA, 25th April, 1872.

C. T. WALCOT,
Acct. Indian Affairs.

H.—STATEMENT shewing the number of Acres of Indian lands sold during the year ending 30th June, 1871.

No Acres.	To what Tribe belonging.	Amount of Principal.	Average rate per acre.
		$ cts.	$ cts.
7,072	Chippewas of Saugeen	10,195 15	1 44
86	do Nawash	1,478 12	17 19
230	Batchewana Bay Reserve	115 00	50
11,816	Manitoulin Indians	6,171 89	52
50	Wyendotts of Anderdon	250 00	5 00
Town Lots.	Chippewas of Lakes Huron and Simcoe, Orillia	430 00	.....
200	do Medonte	600 00	3 00
39	Thorah Island	156 00	4 00
24 and Town Lots	Sarnia	7,955 00	.....
291	Six Nations Indians	9,471 67	35 64
19,808		$36,822 83	

DEPARTMENT OF THE SECRETARY OF STATE
FOR THE PROVINCES, INDIAN BRANCH,
OTTAWA, 25th April, 1872.

C. T. WALCOT,
Accountant Indian Affairs.

I.—STATEMENT shewing the quantity of Surveyed Surrendered Indian Lands remaining unsold, with their computed value, on the 30th June, 1871.

Townships.	Where situated.	Estimated Number of Acres.	Average value per Acre.
			$ cts.
Albemarle	Saugeen Peninsula and Owen Sound	17,756 Acres.	2 50
Amabel	,, ,,	6,724½ ,,	2 50
Keppel	,, ,,	267 ,,	2 50
,,	,, ,,		
Half-Mile strip	,, ,,	406 ,,	2 50
Sarawak	,, ,,	85 ,,	2 50
Eastnor	,, ,,	48,260 ,,	1 00
Lindsay	,, ,,	67,310 ,,	1 00
St. Edmund	,, ,,	65,872 ,,	1 00
Bidwell	Manitoulan Island (Lake Huron	24,616 ,,	Agricultural lands 50 cents per acre. Mineral lands $1.00 per acre.
Howland	,, ,,	17,570½ ,,	
Sheguiandah	,, ,,	25,612 ,,	
Billings	,, ,,	24,099 ,,	
Assiginack	,, ,,	23,167 ,,	
Campbell	,, ,,	38,959 ,,	
Carnarvon	,, ,,	36,172 ,,	
Allan	,, ,,	22,075 ,,	
Tehkummah	,, ,,	17,888 ,,	
Sandfield	,, ,,	24,067 ,,	
Macdonald	Garden River (North Shore of Lake Huron	18,401 ,,	
Aweres	Batchewaning Bay	21,544 ,,	
Fenwick	,,	17,168 ,,	
Kars	,,	10,328½ ,,	
Pennefather	,,	17,894 ,,	
Dennis	,,	3,518 ,,	
Herrick	,,	7,205 ,,	
Fisher	,,	12,241 ,,	
Tilley	,,	13,261 ,,	
Haviland	,,	3,821 ,,	
Vankoughnet	,,	2,800 ,,	
Tupper	,,	2,800 ,,	
Archibald	,,	2,980 ,,	
Neebing	Fort William (Lake Superior)	20,660 ,,	
Tyendinaga	Bay of Quinte	6,929 ,,	2 50
Orford	County of Kent	215 ,,	4 68
Thorah Island	Lake Simcoe	705 ,,	4 00
	Total	623,371½ Acres.	

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
INDIAN BRANCH, OTTAWA, 25th June, 1872.

J.—PROVISION RETURN for the year ended 30th June, 1871, for Indians of Lower Canada, in lieu of which a money Commutation is received from the Imperial Government through the Commissariat Department of Canada.

Tribe.	Denomination.	Number of Persons.	Amount paid Sterling.	Remarks.
			£ s. d.	
Abenakis of St. Francis ..	Women half rations	2	2 12 3	For year to 30th Sept., '70.
		2	5 3 3	,, half year to 31st March, '71
		2	2 12 3	,, year to 30th June, 71.
	Total.....	.....	10 7 9	

C. T. WALCOT,
Accountant of Indian Affairs.

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
INDIAN BRANCH, OTTAWA, 25th April, 1872.

K.—COMPARATIVE STATEMENT of the population of the Indian Tribes and Bands throughout Canada, between the years 1870 and 1871.

Name of Tribe or Band.	Population in 1870.	Population in 1871.	Increase.	Decrease.	Remarks.
Province of Ontario.					
Oneidas of the Thames	628	633	5	.....	
Chippewas and Munsees of the Thames	612	611	.....	1	
Moravians of the Thames	273	275	2	.....	
Wyandotts of Anderdon	73	73	.....	.....	
Chippewas, Pottawatanies and Ottawas, of Walpole Island	798	804	6	.....	
Chippewas of Sarnia	552	547	.....	5	
Do Snake Island	128	130	2	.....	
Do Rama	270	264	.....	6	By death.
Do Christian Island	191	185	.....	6	By emigration.
Odahwahs and Pottawataines, of Christian Island	39	39	.....	.....	
Mississaguas of Mud, Rice, and Scugog Lakes	310	311	1	.....	
Mohawks of the Bay of Quinte	725	735	10	.....	
Mississaguas of Alnwick	203	205	2	.....	
Ojibways of Sandy Island	195	198	3	.....	
Chippewas of Saugeen	296	306	10	.....	
Do Cape Croker	342	364	22	.....	12 births; 10 immigrant
Chistian Island Band, on Manitoulin Island	76	84	8	.....	
Six Nations of the Grand River	2,869	2,916	47	.....	
Mississaguas of the Credit	192	210	18	.....	
Chippewas of Lake Superior	1,502	1,453	.....	49	
Do Lake Huron	no retu's	1,072	.....	.....	
Manitoulin Island Indians	do	1,566	.....	.....	
Carleton County Indians	.....	21	.....	.....	
Indians of South Lanark	.....	17	.....	.....	
Do North do	.....	13	.....	.....	
Do South Renfrew	.....	79	.....	.....	
Do North do	.....	94	.....	.....	
Do South Nipissing	.....	75	.....	.....	
Do North do	.....	312	.....	.....	
Province of Quebec.					
Iroquois of Sault St. Louis	1,650	no retu's	.....	.....	
Do St. Regis	843	896	53	.....	
Nipissings, Algonquins and Iroquois of the Lake of Two Mountains	395	416	11	.....	
River Desert Indians	109	113	4	.....	
Do Temiscaming Indians	.....	198	.....	.....	
Indians of South Pontiac	.....	68	.....	.....	
Do North do	.....	520	.....	.....	
Do Hull Township	.....	66	.....	.....	
Do Picanok	.....	21	.....	.....	
Do Hincks	.....	15	.....	.....	
Do Eagle River	.....	22	.....	.....	
Do Kensington	.....	1	.....	.....	
Do Bouchette	.....	9	.....	.....	
Do Tomasine	.....	196	.....	.....	
Do Kakebouga	.....	92	.....	.....	
Do Bowman	.....	8	.....	.....	
Do Lièvres West	.....	54	.....	.....	
Do Mulgrave	.....	20	.....	.....	
Do St Angelique	.....	3	.....	.....	
Do Petite Nation	.....	1	.....	.....	
Do Ripon	.....	4	.....	.....	
Do North Nation	.....	44	.....	.....	
Do North Rouge	.....	75	.....	.....	
Do Argenteuil	.....	6	.....	.....	

RETURN K.—*Continued.*

Name of Tribe or Band.	Populat'n in 1870,	Populat'n in 1871.	Increase.	Decrease.	Remarks.
Province of Quebec.					
Indians of Doncaster	.....	8	.....	.....	
Do Montcalm	.....	12	.....	.....	
Do Joliette	.....	5	.....	.....	
Do Berthier	.....	6	.....	.....	
Do Richelieu	.....	3	.....	.....	
Do Iberville	.....	7	.....	.....	
Do Missisquoi	.....	8	.....	.....	
Do Shefford	.....	1	.....	.....	
Do Maskinonge	.....	20	.....	.....	
Do South St. Maurice	.....	9	.....	.....	
Do North do	.....	175	.....	.....	
Abenakis of St. Francis	264	273	9	.....	
Do Bécancour	72	68	.....	4	
Indians of Stanstead	.....	2	.....	.....	
Do Compton	.....	5	.....	.....	
Do Portneuf	.....	3	.....	.....	
Hurons of Lorette	329	235	.....	.....	
Montagnais of Point Blew, Chicoutimi, Roberval, &c.	.....	423	.....	.....	
Montagnais of the Moisie, Seven Islands, Betsiamits and Mingan	.....	1,309	.....	.....	
Amalecites of Viger	91	79	.....	12	
Micmacs of Maria and Restigouche	1,000	no retu's	.....	.....	
Indians of Gaspè Basin	.....	84	.....	.....	
Province of Nova Scotia.					
Indians of Annapolis	.....	63	.....	.....	
Do Colchester	.....	31	.....	.....	
Do Cumberland	.....	44	.....	.....	
Do Digby	.....	224	.....	.....	
Do Guysborough	.....	48	.....	.....	
Do Halifax	.....	115	.....	.....	
Do Hants	.....	168	.....	.....	
Do Kings	.....	61	.....	.....	
Do Lunenburg	.....	50	.....	.....	
Do Picton	.....	125	.....	.....	
Do Queens	.....	83	.....	.....	
Do Shelburne	.....	28	.....	.....	
Do Antigonish	.....	93	.....	.....	
Do Yarmouth	.....	20	.....	.....	
Do Cape Breton	.....	188	.....	.....	
Do Inverness	.....	138	.....	.....	
Do Richmond	.....	78	.....	.....	
Do Victoria	.....	69	.....	.....	
Province of New Brunswick.					
Indians of Restigouche	.....	74	.....	.....	
Do Queens	.....	37	.....	.....	
Do Sunbury	.....	26	.....	.....	
Do Northumberland	.....	436	.....	.....	
Do Westmoreland	.....	93	.....	.....	
Do Gloucester	.....	54	.....	.....	
Do Charlotte	.....	49	.....	.....	
Do Kent	.....	248	.....	.....	
Do Victoria	.....	112	.....	.....	
Do St. John	.....	23	.....	.....	
Do Kings	.....	76	.....	.....	
Do Gloucester	.....	54	.....	.....	
Do Carleton	.....	21	.....	.....	
Do York	.....	159	.....	.....	
Province of Manitoba.					
Indians of Rainy Lake	.....	386	.....	.....	
Do Lake of the Woods	.....	346	.....	.....	
Do do	.....	115	.....	.....	

RETURN K.—*Continued.*

Name of Tribe or Band.	Populat'n in 1870.	Populat'n in 1871.	Increase.	Decrease.	Remarks.
Province of Manitoba.					
Indians of Shoal Lake	.....	111	.....	.....	
Do Fort Francis	.....	49	.....	.....	
Salteaux Indians	.....	not giv'n	.....	.....	
Cree Indians estimated at	.....	7,000	.....	.....	
Blackfeet do do	.....	4,000	.....	.....	
Blood do do	.....	2,000	.....	.....	
Peagin do do	.....	3,000	.....	.....	
Lurcees do do	.....	200	.....	.....	
Assiniboine do do	.....	500	.....	.....	
Wood Crees do do	.....	425	.....	.....	
R. M. Assiniboine Indians estimated at	.....	225	.....	.....	
Province of British Coumbia.					
Flathead Indians estimated at	.....	7,300	.....	.....	
Thompson do do	.....	2,050	.....	.....	
Similkameen do do	.....	500	.....	.....	
Shushwap do do	.....	1,250	.....	.....	
Lillset do do	.....	1,300	.....	.....	
Fraser Lake Indians do	.....	not giv'n	.....	.....	
Williams Lake do Carriboo	.....	,,	.....	.....	
Peace River do estimated at	.....	,,	.....	.....	
Kootemay do do	.....	,,	.....	.....	
Comux do do	.....	100	.....	.....	
Yuklatan do do	.....	1,500	.....	.....	
Quackwell do do	.....	2,000	.....	.....	
Chimseau and Nap Indians estimated at	.....	4,000	.....	.....	
Sougas and Sticksen do do	.....	400	.....	.....	
Hydah do do	.....	3,000	.....	.....	
Nootka Sound do do	.....	2,000	.....	.....	
Clayequot and Barclay Sound Indians	.....	2,000	.....	.....	
Nitinal Indians estimated at	.....	1,500	.....	.....	
Rupert's Land.					
Albany River. Indians of Osnabugh	.....	350	.....	.....	
Albany River. Do Martin's Falls	.....	300	.....	.....	
Albany River. Do Long Lake	.....	250	.....	.....	
Albany River. Do Albany	.....	700	.....	.....	
Moose River. Do New Brunswick	.....	150	.....	.....	
Moose River. Do Mattamagamingue	.....	120	.....	.....	
Moose River. Do Flying Post	.....	100	.....	.....	
Moose River. Do Mettachewan	.....	50	.....	.....	
Moose River. Do Abittibi	.....	450	.....	.....	
Moose River. Do Long Portage Post	.....	50	.....	.....	
Moose River. Do Moose Factory	.....	420	.....	.....	
Eastmain. Rupert's River. Do Waswanapee	.....	200	.....	.....	
Eastmain. Rupert's River. Do Mistasine	.....	150	.....	.....	
Eastmain. Rupert's River. Do Rupert's House	.....	400	.....	.....	
Eastmain. Do Fort George, Great Whale River	.....	450	.....	.....	
Eastmain. Indians of Little Whale River	.....	50	.....	.....	
Eastmain. Do Nitchequon	.....	180	.....	.....	

INDIAN BRANCH,
DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 25th April, 1872.

L.—Statement of the Condition of the various Indian Schools within the Dominion of Canada.

Indian Reserve or Band.	Name of Teacher.	Salary per annum.	From what Funds paid.	No. of Boys.	No. of Girls.	Total No.	Remarks.
Province of Ontario.		$ cts.					
Mount Elgin Industrial School.....	Revd. James Gray	Not known.	Wesleyan Methodist Missionary Society and Indian Friends.	27	13	40	Thirty Indian children are paid for from Indian Funds at the rate of $60 per annum each; the boys being taught trades and farming, the girls housewifery, tailoring, &c.
Moravians of the Thames	J. G. Bryson	300 00	Indian Friends.....	31	17	48	
Wyandotts of Anderdon.....	James Crowley	250 00	,, ,,	6	7	13	
Chippewas of Sarnia	Wm. Marsden	300 00	$250 Indian Funds, and $50 Wesleyan M. Fund	23	20	43	
,, Walpole Island.....	James Cameron.....	300 00	$200 Church of England, $100 Indian Funds.....	35	11	46	
,, Kettle Point.....	J. Greenbird.....	300 00	$150 Indian Funds, $150 Church of England.....	6	7	13	
,, and Munsees of the Thames	Joseph Fisher	200 00	Indian Funds.....	24	26	50	
,, ,,	Joseph Wancansh	200 00	,, ,, ...	22	18	40	
Oneidas ,,	Miss Delong.....	200 00	Wesleyan Mission Society	10	6	16	
Chippewas of Saugeen	Miss M. A. Jones	200 00	Indian Funds.....	18	15	33	
,, ,, ...	Miss S. J. Dowling	200 00	Wesleyan Mission Society.	26	25	51	
Mississaguas of Scugog.....	Miss Cathy...	160 00	Wesleyan Mission Society.....	8	6	14	
,, Mud Lake	George Crook.....	400 00	New England Company	26	20	46	
,, Alnwick	Miss Barry	200 00	Wesleyan Mission Society.....	26	20	46	
,, Rice Lake.....	L. Sanderson	200 00	Wesleyan Mission Society.....	17	14	31	
Chippewas of Cape Croker	David Craddock	250 00	$200 Indian Funds, $50 Church of England.	33	30	63	
,, Rama	Miss E. A. Barrett	200 00	$100 Indian Funds, $100 Wesleyan Mission Society.....	29	18	47	
,, Snake Island.....	Wm. Law	250 00	$200 Indian Funds, $50				

L.—Statement of the Condition of the various Indian Schools within the Dominion of Canada.—*Continued.*

Indian Reserve or Band.	Name of Teacher.	Salary per annum.	From what Funds paid.	No. of Boys.	No. of Girls.	Total No.	Remarks.
Province of Ontario.—*Continued.*		$ cts.					
			Wesleyan Mission Society	15	10	25	
„ Georgina Island	Chas, Grylls	200 00	Wesleyan Mission Society	15	11	26	
„ Christian Island	Miss A, McLean	200 00	$100 Indian Funds, $100 Wesleyan Mission Society	22	26	48	
Mohawks of Bay of Quinte	Alexr. Hewitt	185 00	Indian Funds	17	14	31	
„ „	Chas, Irvine	200 00	New England Company	3	4	7	
„ „	Miss L. Hill	166 00	$100 Indian Funds, $66 New England Company	13	17	30	
Mississaguas of the Credit on the Grand River	Alfred A. Jones	250 00	Indian Funds	19	13	32	
Mississaguas of the Credit on the Grand River	James A. Wood	250 00	„	20	5	25	
Six Nation Indians, No. 1	Thomas Griffith	320 00	New England Company	50	45	95	Boarding school, educated, clothed, and fed at the expense of the Company.
„ „ 2	Isaac Barefoot	300 00	„				
„ „ 3	George Martin	200 00	„	25	27	52	
„ „ 4	Moses Martin	200 00	„	15	19	34	
„ „ 5	George Powles	200 00	„	31	14	45	
„ „ 6	Charles Jackson	200 00	„	14	19	33	
„ „ 7	John Cusick	200 00	„	29	24	53	
„ „ 8	Miss Diamond	200 00	„	14	11	25	
„ „ 9	Miss Crombie	200 00	„	49	45	94	
„ „ 10	Mrs. Beaver	200 00	„	13	12	25	
„ „ 11	Susan Hill	200 00	„	15	24	39	
Wikwemikong, Manitoulin Island	Miss M. Diamond	200 00	Wesleyan Mission Sc'y.	11	9	20	
	Rev. Jos. Jennesseaux Miss Andreont	300 00	Indian Funds	85	 55	140	
Shesheguaning „	Wm. Barril	300 00	Congregational Society	14	16	30	
Sheguiendah „	William Stinson	300 00	$50 Indian Funds, $250 New England S'city.	32	25	57	
Garden River Indians	Mrs. Chance	200 00	Colonial and Continental Church Society	Not	stated	20	
Fort William Indians of Lake Superior.	Miss J. Martin	150 00	Indian Funds	20	25	45	

Golden Lake Indians of the County of Renfrew	Miss Ann Connelly	170 00	$150 Indian Funds, $20 by the Indians	17	13	30	
Province of Quebec.							
Micmacs of Restigouche	Miss Victoria Lepage	160 00	$150 Indian fund, $10 from Bureau of Education	24	20	44	
" Maria	Helen Pritchard	150 00	Indian Funds	20	11	31	
Lake of Two Mountain Indians	Frere Philip	189 80	Roman Catholic Church	42	....	96	
" "	Sœurs Stes. Mathilde and Elzear	341 24	" "	.....	54		
Iroquois of Caughnawaga	Mr. & Mrs. Fletcher	300 00	Indian Funds	107	75	182	
Abenakis of St. Francis	Jos. Laurent	276 00	$120 Indian Funds, and $156 Bureau of Education	16	23	39	
River Desert Indians	Sisters Gertrude and Margaret Mary	150 00	Indian Funds	49	60	109	
Betsiamits Indians	.....	.....	.....	.....	.....	.....	
Iroquois of St. Regis	Mrs. M. J. Powell	200 00	Indian Funds	21	25	46	
Hurons of Lorrette	Miss L. Dubuc and	170 00	Bureau of Education	27	23	50	
Indians of Moisie and Seven Islands	J. G. Vincent	124 00					
Province of Nova Scotia.							
Bras d'Or Lake, Cape Breton.							
School No. 1	.....	.....	.....	.....	.....	.....	Not heard from.
" 2	.....	.....	.....	.....	.....	.....	"
" 3	.....	.....	.....	.....	.....	.....	"
Province of New Brunswick.							
Indians of Tobique	Charles Meahan	150 00	Indian Funds	.....	.....	...	"
" Shediac	Frank Bernard	.....	.....	.....	.....	.....	"

Department of the Secretary of State for the Provinces,
Indian Branch, Ottawa, 25th April, 1872.

RETURN M.

STATEMENT.

Number of Letters received in 1870-71		2,114
" " 1869-70		2,023
Increase in 1870-71		91
Number of Letters checked off as answered in 1870-71		1,182
" " " 1869-70		1,15
Increase in 1870-71		27
Extra Entries on account of Letters in 1870-71		1,274
" " " 1869-70		1,172
Increase in 1870-71		102
Total number of Entries in Letter Register for 1870-71		4,570
" " " 1869-70		4,350
Increase in 1870-71		220
Number of Letters written and entered in 1869-70		1,731
" " " 1870-71		1,577
Decrease in 1870-71		154
Number of Reports entered as made in 1869-70		130
" " " 1870-71		69
Decrease in 1870-71		61
Number of Assignments registered under the Act 23 Vic. Cap. 2, during the year 1870-71		84
" " " " " " 1869-70		75
Increase in 1870-71		9

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
INDIAN BRANCH, OTTAWA, 25th April, 1872.

OFFICIAL RETURN

Of the Distribution of the STATUTES OF CANADA, 34 Victoria, transmitted for the information of the House of Commons.

By Command.

J. C. AIKINS,

Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,

OTTAWA, 24th April, 1872.

[In accordance with the recommendation of the Joint Committee on Printing, the above Return is not printed.]

Statement of Receipts and Expenditure of Canada, from the 1st July, 1871, to the 31st March, 1872.

STATEMENT of RECEIPTS and EXPENDITURE of Canada, from the 1st July, 1871, Expenditure for the current year,

RECEIPTS.

SERVICE.	Receipts to 31st March, 1872.	Estimated Revenue.	Balance.
	$ cts.	$ cts.	$ cts.
Customs	6,987,787 45	10,000,000 00	1,012,212 55
Excise	3,419,592 99	4,300,000 00	880,407 01
Post Office	459,461 02	500,000 00	40,538 98
Public Works	859,946 50	1,000,000 00	140,053 50
Bill Stamps	141,506 44	160,000 00	18,493 56
Casual	9,034 82		
Ordnance Lands	30,962 88		
Interest on Investments	221,898 82		
Bank Imposts	5,384 67		
Fines and Forfeitures, including Seizures	11,610 17		
Premium Discount and Exchange	29,963 77		
Mariners' Fund	22,326 94		
Harbour Police	16,886 73		
Emigration	18,569 50		
Steamboat Inspection	5,590 36	850,000 00	265,417 14
Fisheries	2,868 68		
Cullers	71,455 41		
Militia and Defence	36,664 84		
Penitentiaries	63,876 01		
Sundry Special Receipts	1,269 77		
Marine Hospitals	254 50		
Harbour Improvements	1,446 10		
Canada Gazette	792 07		
Superannuation Fund	30,828 54		
Lighthouses and Coast Service	2,898 28		
Total Consolidated Fund	14,452,877 26	16,810,000 00	2,357,122 74

to the 31st March, 1872, together with the Estimated Revenue and Authorized and the Balances of the same.

EXPENDITURE.

SERVICE.	Expenditure to 31st March, 1872.	Total Authorized Expenditure.	Balance.	Expended over Estimate.
	$ cts.	$ cts.	$ cts.	$ cts.
Interest on Public Debt	2,804,724 61	5,138,494 17	2,333,769 56	
Charges of Management	219,121 58	89,059 10	.....	130,062 48
Sinking Fund	401,500 01	376,180 80	.....	25,319 21
Premium Discount and Exchange	28,755 36	20,000 00	.....	8,755 36
Civil Government	459,884 53	678,974 99	219,090 46	
Administration of Justice	163,596 55	335,466 66	171,870 11	
Police	29,550 70	45,348 00	15,797 30	
Penitentiaries	144,150 57	294,631 52	150,480 95	
Legislation	128,846 30	407,198 75	278,352 45	
Geological Survey and Observatories	34,830 90	50,100 00	15,269 10	
Arts, Agriculture, and Statistics	2,871 81	6,470 00	3,598 19	
Census	201,148 98	400,493 63	199,344 65	
Emigration and Quarantine	65,468 35	107,672 00	42,203 65	
Marine Hospitals	29,293 62	39,000 00	9,706 38	
Pensions	45,725 44	53,733 87	8,008 43	
Superannuation	23,231 56	.....	.....	23,231 56
Militia 1,108,197 19	.....	1,726,870 79	616,921 15	
Protection of Frontier 1,752 45	.....			
Manitoba Expedition 62,150 72	.....	.....	.....	62,150 72
	1,172,100 36			
Public Works and Buildings	280,999 86	2,024,601 68	1,743,601 82	
Ocean and River Steam Service	270,903 69	375,941 00	105,037 31	
Lighthouses and Coast Service	239,697 21	348,516 00	108,818 79	
Fisheries	57,212 95	113,657 14	56,444 19	
Culling Timber	56,643 80	73,400 00	16,756 20	
Steamboat Inspection	6,683 06	8,500 00	1,816 94	
Subsidies to Provinces	2,941,830 38	2,552,130 10	.....	389,700 28
Miscellaneous	29,167 55	244,900 00	215,732 45	
British Columbia (Excess over Revenue)	43,465 36	125,000 00	81,534 64	
North West Territories	59,874 02	118,074 15	41,228 28	
Crown Lands, Manitoba	16,971 85			
Charges on Revenue.				
Customs	352,382 19	525,336 25	172,954 06	
Excise	108,964 40	150,100 00	41,135 60	
,, Weights and Measures	.....	50,000 00	50,000 00	
Post Office	639,776 91	858,000 00	218,223 09	
Public Works	554,137 32	904,042 00	349,904 68	
Minor Revenues	7,183 46	10,000 00	2,816 54	
Total Consolidated Fund	11,620,695 24	18,251,892 60	7,270,416 97	639,219 61

RECEIPTS.

SERVICE.	Receipts to 31st March, 1872.
	$ cts.
Stock bearing 6%	40,780 00
do 5%	262,610 00
Savings' Banks	1,157,971 74
Total Loans	1,461,361 74
Consolidated Fund, Investment Account	1,071,979 99
Bank of Montreal, Advance Account	25,159 09
do Special Deposit Account	200,000 00
do Intercolonial Railway Construction Account	644,691 00
Province of Canada, Debt Account	200 09
Ontario and Quebec, Special Account	14,000 00
do Subsidy Account	1,726,330 34
Province of Ontario, Debt Account	89,258 00
do Quebec, do	30,282 82
do New Brunswick, Subsidy Account	4,301 20
do British Columbia, Crown Agents' Account	41,548 96
Indian Fund	176,223 28
Widows' Pensions and Uncommuted Stipends, Upper and Lower Canada	976 19
Copyright Duties	355 54
Crown Agents for Colonies	59,989 36
Military Property	1,046 92
Imperial Fortifications, Special Account	5,100 00
London and Lancashire Insurance Company	25,061 14
Bank of Upper Canada, Liquidation Account	50,264 29
Total Open Accounts	4,166,768 12

EXPENDITURE.

SERVICE.	Expenditure to 31st March, 1872.	Estimated Expenditure.	Balance.
	$ cts.	$ cts.	$ cts.
Redemption of Debt	687,290 10	1,040,664 15	353,374 05
do Dominion Notes	197,191 92		
do Floating Debt, British Columbia	218,632 34		
Savings' Banks	278,277 38		
Total Redemption	1,381,391 74		
Bank of Montreal, Advance Account	52,967 82		
do Special Deposit Account	800,000 00		
do Intercolonial Rail. Construction Account	89,198 29		
Royal Canadian Bank, Special Account	150,000 00		
Intercolonial Railway	3,718,709 21	6,000,000 00	2,281,290 79
Opening of North-West Territory	207,764 38	400,000 00	192,235 62
North-West Territory Expeditionary Force 45,166 52			
Less Receipts 1,366 94			
	43,799 58		
Pacific Railway	280,757 64	1,785,800 00	1,035,397 40
Public Works, Chargeable to Capital	469,744 96		
Province of Canada, Debt Account	822 68		
Ontario and Quebec, Special Accounts	10,258 20		
Province of Ontario, Debt Account	1,098,004 09		
do Quebec, do	800,000 00		
do New Brunswick, Debt Account	5,500 00		
do British Columbia, Crown Agents' Account	15,898 91		
Indians	102,192 40		
Widows' Pensions and Uncommuted Stipends	2,351 76		
Copyright Duties	526 73		
Crown Agents of Colonies	62,770 07		
Bank of Upper Canada, Advance Account	16,383 44		
Unpaid Dividends	15,296 00		
Total Open Accounts	7,942,946 16	.....	.....

RECAPITULATION.

RECEIPTS. EXPENDITURE.

Description.	Receipts to 31st March, 1872.	Estimated Receipts.	Balance.	Description.	Expenditure to 31st March, 1872.	Authorized Expenditure.	Balance.
	$ cts.	$ cts.	$ cts.		$ cts.	$ cts.	$ cts.
Consolidated Fund	14,452,877 26	16,810,000 00	2,357,122 74	Consolidated Fund	11,620,695 24	18,251,892 60	6,631,197 36
Loans	1,461,361 74			Redemptions	1,381,391 74		
Open Accounts	4,166,768 12			Open Accounts	7,942,946 16		
	20,081,007 12				20,945,033 14		

GENERAL RECAPITULATION.

—	Receipts.	Expenditure.	Excess of Receipts.	Excess of Expenditure.
	$ cts.	$ cts.	$ cts.	$ cts.
Consolidated Fund	14,452,877 26	11,620,695 24	2,832,182 02	
Loans and Redemptions	1,461,361 74	1,381,391 74	79,970 00	
Open Accounts	4,166,768 12	7,942,946 16		3,776,178 04
	20,081,007 12	20,945,033 14	2,912,152 02	3,776,178 04

REPORT OF THE COMMISSIONERS

OF THE

INTERCOLONIAL RAILWAY.

SIR,—I have the honor to submit the Annual Report of the Intercolonial Railway Commissioners.

I am, &c.,
A. WALSH,
Chairman.

The Hon.
The Minister of Public Works.

The Commissioners appointed to construct the Intercolonial Railway, beg to submit their report of the progress of the works since the date of their former report of the 9th March, 1871.

They herewith submit (Appendix "A") a balance sheet, showing the expenditure upon the line up to the 30th March, 1872, and (supplemental sheet B) shewing the expenditure on each principal item to 31st December, 1870, and 30th March, 1872, respectively.

A reference to the figures in two of the columns of the supplemental sheet B, will show the amounts which have been expended upon each item in the fifteen months between the 31st December, 1870, and the 30th of March, 1872.

It will be seen that the total expenditure has amounted to the sum of	$8,641,103 81
The expenditure to the 31st December, 1870, was	3,565,692 63
So that the expenditure during the fifteen months embraced in this report has amounted to the sum of	$5,075,411 18

This latter amount is made up of the following expenditure under different headings shown, viz.: For works and permanent way :

Construction		$3,441,590 22	
Rails	$521,783 68		
Iron Bridges	169,344 96		
Cross ties	92,634 57		
Track-laying and ballasting	49,111 18	832,874 39	
			$4,274,464 61
Buildings			90,203 96
Engineering and survey	243,499 10		
Less difference of paymaster's balances	7,157 74		
			236,341 36
Legal expenses, land survey, and land valuation			15,438 14
Management			25,558 87
Printing, advertising and stationery			3,791 89
Right of way			56,300 54
Rolling stock			372,711 81
Cord wood			600 00
			$5,075,411 18

From this it will be seen that a very large amount of work has been executed during the fifteen months. The statement (Appendix "C") showing the approximate force employed upon the several contracts during the month of July, 1871, will give a fair indication of the force employed during the working season. During the period of the year when heavy snow and great cold was experienced, there has been a much smaller force employed upon many parts of the line; indeed, the working season is short, requiring a large quantity of work to be executed in the space of a few months. There is also attached (Appendix "D") a statement shewing the names of the different contractors upon the twenty-three sections into which the work is divided, the dates upon which the several contracts were executed, the amount of each contract, the sum paid on account of such contract up to the 30th of March, 1872, and the balance in each case which remains to be paid.

All the contracts for these twenty-three sections were let at the date of the last report, on the 9th of March, 1871, and the work has since been prosecuted by the same contractors up to the present time.

The Commissioners will now proceed to give a brief statement of the condition of the works upon each of these contracts.

No. 1.

This is almost entirely completed, and track has been laid upon it for about three-fourths of its entire length. There is nothing remaining to be done, except the levelling up and dressing of such parts of the work as may have been affected by the past winter; so soon as the weather will permit it will be completed and ballasted to the road crossing at Trois Pistoles, on Section No. 2.

No. 2.

The work upon this section is completed, with the exception of the heavy clay cuttings at Trois Pistoles, one of the hardest and toughest pieces of work upon the entire line. The works have been in progress in these cuttings during the winter, and there seems to be no reason to doubt that they will be completed throughout early in the coming season. The masonry upon this section is all completed, and the iron work for the bridge across the Trois Pistoles River (five spans of 100 feet) is now in Quebec, and will be erected as soon as navigation opens, and the spring freshets are over.

No. 5.

The works upon this section have been very vigorously prosecuted up to the present time. The Commissioners have every confidence that the contractors will complete this section so that the track may be laid over it during the coming season.

No. 8.

The work upon this section has been completed, and taken off the hands of the contractor. Track will be laid over it as soon as No. 5 is completed, and it is expected that there will be no difficulty in completing the whole of the line from Riviere du Loup to the Metapedia Road before the close of the present year.

No. 13.

This is the heaviest section upon the entire line and is very difficult of access. The organization of the requisite force and plant for a heavy work like this necessarily occupied a considerable time; the progress during the past season was satisfactory. The Contractors promise the most vigorous prosecution of the works during the coming season; but it will probably require some special arrangements in two heavy rock cuttings upon this section to ensure its completion so as to have the track laid over it before the end of next year.

No. 14.

The greater part of the work on this section has been completed, and there is no doubt that it will be entirely finished before the close of the present year. Track, however, cannot be laid over it until it is approached from either end upon the completion of the sections adjoining it.

Nos. 17 and 18.

These sections are in the heart of the Metapediac Valley, upon which there is hardly any population, and consequently it has been exceedingly difficult to get labor to them, it being absorbed by the sections in progress upon either side and the supplies have had to be taken from long distances. The work upon these two sections is not however of a very heavy nature, and looking to the magnitude of section 13 upon one side of them, and the heavy bridge across the Restigouche upon the other, there is no great necessity for unduly hurrying the completion of these two sections.

No. 19.

This section includes the heavy bridge across the Restigouche River, being five spans of 200 feet each. There has been great difficulty in obtainng suitable stone for this important work. The stone in the vicinity having proved, upon careful examination, to be generally unsatisfactory for so heavy a work, it was determined at one time to bring the bulk of it from the granite quarries at Bathurst, but after very extensive explorations, suitable stone has been discovered not far from the bridge site, which will materially facilitate the completion of this work. The remainder of the work upon this section has made satisfactory progress and will be completed before the bridge is finished.

Nos. 3 and 6.

These sections are in the hands of the same Contractors and have had a considerable amount of work done upon them during the last season. There was great difficulty experienced in finding stone for the structures upon these two sections, great expense was therefore incurred in endeavouring to find suitable quarries, and although a good many had been opened at various times, only a few have been found available for the purpose required. During last Spring, however, very good quarries were opened at various points along the line, from which the necessary quantity of stone has been obtained. This has been placed upon the line in large quantities, a great deal of it has been laid in the various pieces of masonry and there seems to be no reason to doubt the remaining masonry, by the aid of the material which has now been found, will be completed during the present year. There is some very heavy rock work upon No. 3, especially at a point called "Morrisey's Rock," This will in part be tunnelled, and there is no doubt that this work will be completed within the next two or three months at the latest. The grading upon these two sections is in a forward state, and can be completed with reasonable certainty during the present season.

Nos. 9 and 15.

These two sections are in the hands of the same Contractors, and the same difficulties that have been experienced in regard to 3 and 6, were found to exist on these two sections.

A great deal of work has however now been done upon both, and there seems to be no reason to doubt that the greater bulk of the work will be completed by the end of the present year.

These four sections have been constructed in parts of the country where no public works of any magnitude have ever previously been constructed; the population is not large, and there has consequently been very considerable difficulty in obtaining skilled labor for such works.

No. 16.

This section runs almost entirely through unbroken forest and in a country where there is no population upon the actual line.

There has therefore been great difficulty in getting access to it, and in inducing men to work upon it, whilst work of an easier and more accessible character could be found at other places. During the past winter however, a great deal has been done in the way of providing access to the section, of getting in supplies and providing stone for culverts and bridges. With these preparations, added to the amount of work which has already been done, there will not be much difficulty in completing the great bulk of the work upon this section by the end of the present year.

No. 10.

This section is in the hands of the Contractor, who completed section 8. A considerable quantity of work has been done upon this section, and with the supplies and and preparations which have been made will be practically completed before the close of the present year.

No. 20.

This is a very heavy section, including the bridges over the two branches of the Miramichi river. These bridges were originally intended to consist of 11 spans of 200 feet each.

Serious difficulties, after the contract was let, were encountered in the foundations, it appearing that what was supposed to be rock, was a stratum of gravel and hard pan of varying thickness, and with an intermediate quantity of sand and clay between it and the rock; careful examinations have been made into this question, and a plan has at length been adopted which the chief engineer believes will overcome the difficulties which have been found to exist.

The number of spans has been increased by one extra span of 200 feet, making the total length of iron bridging in the two bridges of the river 2,400 feet. The delay which has taken place owing to the question of foundations, has necessitated an extension of time to the contractors.

It will take the whole of the present and next year to complete the work on these two bridges. The increased cost of the extra span of iron and the increased payment for the piers will be about $45,000.

Nos. 21, 22, and 23.

These sections were let at the same time, and the work upon them has been vigorously prosecuted up to the present date. The most difficult, of course, owing to the inaccessible character of the country and the absence of labor upon the line, is the centre one, No. 22.

A large amount of material and supplies have been placed upon these three sections and a considerable force employed during the past winter, and this will enable the great bulk of the work to be completed during the present year. Track laying may be commenced both from Moncton and Miramichi river during the present year, and carried to completion on the opening of the season of 1873.

This carries the line to Moncton, where a Junction is made with the existing European and North American Railway. The line runs for eight miles along that railway to Pansic Junction, from which point to Amherst, a distance of 42 miles, has been already completed, and has been worked by the Government in connection with the European and North American Railway.

No. 4.

This commences at Amherst, and is practically completed, there being nothing upon this section to interfere with the laying of track along its whole length. Track laying was commenced last Fall, and about twelve miles has now been laid.

No. 7.

This section is also in a very forward state, and by the time the track layers reach it there will be nothing to obstruct them; the whole of the work upon this section will be completed within the next two or three months.

No. 12.

This section comprises only heavy work which has been vigorously prosecuted up to the present time; with the exception of three of the piers of the Folly river bridge, which are only partially finished; the great bulk of the masonry upon this section is completed, and the earth and rock excavation remaining to be done is not large, and will be completed in ample time for the tracklayers; this carries the line to Truro, where a junction is effected with the existing railway from Pictou to Halifax. Nearly four thousand tons of the rails required between Amherst and Truro have been landed at St. John and Halifax.

Track laying will be resumed in the course of a few days, and the remainder of the rails required to complete the line between Amherst and Truro have been shipped from England, and are now arriving.

The track laying and ballasting has been let to competent and responsible parties who have already placed two steam shovels in ballast pits at proper and convenient distances upon the line, and the Commissioners have every reason to expect that the railway between St. John and Halifax will be completed and trains running over it during the month of September, of the present year.

The Commissioners confidently anticipate the completion by the end of the year of the following lengths of the Intercolonial Railway, all of which will be in first-class condition to carry traffic, viz:

Rivière du Loup to Metapediac road.....	86⅓ miles.
Pansic Junction to Amherst.....	42 „
Amherst to Truro.....	75½ „
Making a total of.....	204 miles.

Bridges.

In the last report, it was stated that tenders had been invited for iron bridges for all spans of 60 feet and upwards. When the tenders were received, it was found that responsible parties offered to build all the bridges throughout the line upon exceedingly moderate terms, and it was in consequence decided to have the whole of them made of iron. Tenders were received before the late great advance in the price of iron, and there is no doubt if the contracts were to be let now they could not be entered into upon such satisfactory terms.

The same remarks will apply to the rails, which were all purchased at exceedingly moderate prices, compared with those which are now ruling.

Rolling Stock.

The following are the contracts entered into up to the present time for rolling stock,

including two engines and twenty-five platform cars, purchased from the Eastern Extension Railway, viz. :

Engines	42
First-class Cars	6
Second-class Cars	2
Baggage and Post-Office	3
Box Freight Cars	250
Platform Cars	325

These, as manufactured, are carefully inspected during their construction, and, as far as delivered, are of good quality and workmanship.

Management.

The cost of Management to 36th March, 1872, has amounted to the sum of	$70,645	22
The charge to the 31st December, 1870, was	45,086	35
Making the outlay for this purpose during the fifteen months covered by the present Report	$25,558	87

This includes the salaries of the Commissioners, their Secretary, Accountant, and Clerk, telegraphing, postage, travelling and incidental expenses, and office furniture.

Engineering Staff.

The total amount paid for engineering expenses to the 30th March, 1872, has amounted to	$857,203	16
Of which 150,711 80 was expended prior to the appointment of the Commissioners.		
The total outlay for Engineering Expenses up to the 31st December, 1870, was	$613,704	06
Shewing that there as been an expenditure during the last fifteen months of	$243,499	10

Since the date of the last report, considerable reductions have been made in the Engineering Staff, consequent upon the amount of work which has been executed, and the reduction of that remaining to be done. All the work has now of course been finally located and staked out, plans of the various structures have been settled and supplied to the Contractors, thus largely reducing the work to be done by the Engineering Staff. (Appendix " E") contains a comparative statement of Staff organization and expenditure.

The aim of the Commissioners has been, and will continue to be, to maintain such a staff only as is consistent with a due regard to efficiency in construction.

Right of Way.

The cost of Right of Way up to the 30th March, 1872, has been	$157,155	75
To which has to be added the cost of land surveying, the cost of valuation of the lands, and the legal expenses connected with the enquiries into the proper titles of the proprietors of the lands	54,822	70
making a total of	$211,979	45

The amounts yet to be paid for right of way are not large, and will not add materially to the above total.

Moncton Workshops.

These workshops have progressed in a very satisfactory manner during the last year.

They will be completed in good time during the summer, and when finished will form one of the most conveniently arranged establishments upon the continent. The amount expended upon them to 30th March, 1872, was..... $57,315 67

Station Buildings.

The necessary station buildings for the line between Amherst and Truro, and between Rivière du Loup and the Matepediac road have been contracted for, and also at Campbellton and Newcastle. They include engine-houses at Rivière du Loup, Matapediac road, Campbellton, Newcastle, and Truro.

General Remarks.

The whole of the works have been executed in a very thorough and substantial manner, and it is believed that there is no railway upon the continent of America upon which the masonry will be superior to, if it equals that upon the Intercolonial.

The Iron Bridging is of the latest and most approved form of construction and is being supplied by two of the most eminent Bridge Building firms in England and the United States, viz :—

The Fairbairn Engineering Company, in England; and the Phœnixville Bridge Company, in Pennsylvania.

The rails will be of steel throughout and are being supplied by some of the best rail makers in England, viz :—

The Barrow Hematite Steel Company, and the Ebbeo Vale Company.

The Contract for the works up to the formation level, the bridging and the rails have all been let upon exceedingly moderate terms and there is no doubt that the Intercolonial when completed will be not only one of the best constructed but cheapest railways ever built upon the continent.

The rolling stock that is being supplied is of the best description. has been contracted for upon moderate and satisfactory terms, and will be found, although moderate in extent, to be capable of performing a very large amount of work.

The keys to the completion of the entire line are the extensive works upon Section No. 13, and the heavy bridges across the two branches of the Miramichi River.

The Commissioners will see to it that no exertions shall be wanting on their part to push the whole to completion with the least possible delay, and they have every expectation that the line will be in running order by the end of 1873.

A. Walsh,
Ed. B. Chandler,
C. J. Brydges,
A. W. McLelan. } *Commissioners.*

Intercolonial Railway,
Commissioners Office,
Ottawa, 2nd April, 1872.

APPENDIX A.

BALANCE SHEET of General Ledger of the Intercolonial Railway, at the 30th March, 1872.

DR.

	$ cts.	$ cts.	$ cts.
BUILDINGS :—			
Aınherst Station		10,549 15	
Engineers' Houses		29,438 23	
Moncton Station		57,315 67	
Painsec Junction Station		2,049 30	
			99,352 35
ENGINEERING AND SURVEY :—			
Amount previous to appointment of Commissioners		150,711 80	
Amount subsequent to do		706,491 36	
			857,203 16
Legal expenses, land survey and land valuation			54,823 70
Management			70,645 22
Printing, advertising and stationery			19,214 48
RIGHT OF WAY :—			
Province of Quebec		72,061 77	
do of New Brunswick		39,365 98	
do of Nova Scotia		45,728 00	
			157,155 75
ROLLING STOCK :—			
Locomotives		146,091 86	
Passenger Cars, 1st Class		6,400 00	
do do 2nd ,,		3,550 00	
Postal do		2,750 00	
Platform do		125,850 00	
Box-freight do		115,680 00	
Snow Ploughs		1,147 62	
Rolling Stock expenses		1,839 73	
			403,309 21
WORKS AND PERMANENT WAY :—			
Construction	5,106,626 00		
Grading and fencing	9,449 21		
Metapediac Road Diversion	17,126 00		
Brown, Brooks & Ryan, advance secured by chattel mortgage on plant, $30,000 00; Smith & Pitblado, special account, $70 00	30,070 00		
Iron Bridges	169,344 96		
Rails, fish-plates, bolts and nuts	537,477 14		
Cross-ties	95,150 02		
Tracklaying and ballasting	51,937 10		
		6,017,180 43	
Eastern Extension Railway		926,810 01	
			6,943,990 44
Elliott, Grant & Whitehead, balance of advance on plant			3,972 00
The Receiver-General, special deposits			21,684 00
PAYMASTERS' BALANCES :			
W. H. Stevenson		1,563 79	
H. W. McCann		7,589 71	
			9,153 50
Cord Wood			600 00
			$8,641,103 81

CR.

The Dominion of Canada		8,620,803 81	
E. Clark, Punchard & Co., balance of purchase of Eastern Extension Railway	300 00		
Geo. & J. Worthington, cial deposit	20,000 00		
		20,300 00	
			$8,641,103 81

APPENDIX B.

SUPPLEMENTAL SHEET shewing the amount of Expenditure by the Commissioners since their last Report, dated 9th March, 1871, up to the 30th March, 1872.

Service.	Amount per Balance Sheet, 31st December, 1870.	Amount from 31st Decr., 1870, to 30th March, 1872.	Total, as per Balance Sheet at 30th March, 1872.
WORKS AND PERMANENT WAY:—	$ cts.	$ cts.	$ cts.
Construction (including "Eastern Extension Railway")	2,648,491 00	3,441,590 22	6,090,081 22
Rails	15,693 46	521,783 68	537,477 14
Iron Bridging	.....	169,344 96	169,344 96
Cross-ties	2,515 45	92,634 57	95,150 02
Tracklaying and Ballasting	2,825 92	49,111 18	51,937 10
	2,669,525 83	4,274,464 61	6,943,990 44
Buildings	9,148 39	90,203 96	99,352 35
Engineering and survey	613,704 06	243,499 10	857,203 16
Legal expenses, land survey and land valuation	39,385 56	15,438 14	54,823 70
Management	45,086 35	25,558 87	70,645 22
Printing, Advertising and Stationery	15,422 59	3,791 89	19,214 48
Right of Way	100,855 21	56,300 54	157,155 75
Rolling Stock	30,597 40	372,711 81	403,309 21
Cordwood	.....	600 00	600 00
Elliott, Grant & Whitehead (balance of advance on plant)	3,972 00	.....	3,972 00
The Receiver General (special deposits)	21,684 00	.....	21,684 00
	2,549,381 39	5,082,568 92	8,631,950 31
Paymasters' Balances	16,311 24	7,157 74	9,153 50
	$3,565,692 63	$5,075,411 18	$8,641,103 81

APPENDIX C.

Intercolonial Railway.

Return, shewing the approximate number of days worked and men employed on the several contract sections during the month of July, 1871.

No. of Contract.	Division of Line.	No. of days Worked.	Approximate force employed for month of July.					
			Foreman and Mechanics.	Laborers.	Boys.	Horses.	Oxen.	Quarrymen.
1	A.	26	30	75	14	16	Nil.	Nil.
2	B.	25	761	7,521	Nil.	2,665	,,	,,
5	C.	25	2,447	16,979	1,106	3,155	,,	,,
8	D.	26	900	2,520	Nil.	360	,,	,,
13	E.	26	2,821	20,332	605	5,682	,,	,,
14	F.	24	1,521	11,349	Nil.	2,906	,,	,,
17	G.	23	969	7,216	1,408	1,934	,,	156
18	H.	26	675	3,884	140	701	,,	Nil.
19	I.	26	1,036	3,227	269	926	,,	,,
3	K.	26	2,336	9,231	1,101	2,140	,,	761
6	L.	26	2,699	15,778	203	Nil.	,,	977
9	M.	25	2,437	9,449	1,033	1,926	,,	639
15	N.	26	3,620	4,944	98	1,119	,,	1,978
16	O.	25	414	1,098	43	194	,,	Nil.
10	P.	25	763	3,607	240	1,023	,,	,,
20	Q.	26	1,331	2,346	141	168	,,	,,
21	R.	26	1,381	5,617	678	1,394	,,	114
22	S.	26	638	4,600	241	501	,,	Nil.
23	T.	24	1,910	11,416	953	2,441	,,	,,
11	W.	Nil.	Nil.	Nil.	Nil.	Nil.	,,	,,
4	X.	26	2,172	11,266	1,054	2,691	245	,,
7	Y.	25	3,307	18,387	2,837	7,219	30	500
12	Z.	26	2,491	14,097	2,062	5,692	Nil.	2,540

APPENDIX D.

STATEMENT, shewing the total value of work done on each Section up to 31st March, 1872.

Section.	Present Contractor.	Date of Contract.	Amount of Contract.	Amount paid former Contractors.	Amount paid present Contractors.	Balance due on Contract.
			$ cts.	$ cts.	$ cts.	$ cts.
No. 1	G. & J. Worthington	4th March, 1869	189,700 00	.....	184,000 00	5,700 00
„ 2	do	„ „	299,000 00	.....	236,000 00	63,000 00
„ 3	F. X. Berlinguet & Co....	25th May, 1870	462,444 00	28,575 00	262,000 00	200,444 00
„ 4	Smith & Pitblado	„ „	438,318 00	46,200 00	423,000 00	15,318 00
„ 5	Alex. McDonell & Co.....	„ „	533,000 00	48,762 00	374,000 00	159,000 00
„ 6	F. X. Berlinguet & Co....	„ „	456,946 00	26,325 00	226,000 00	230,946 00
„ 7	J. Simpson & Co.	„ „	557,750 00	53,731 00	532,000 00	25,750 00
„ 8	Duncan Macdonald.....	1st Nov., 1869	100,000 00	.....	100,000 00	.....
„ 9	J. B. Bertrand & Co.....	26th Oct., 1869	354,897 00	.....	220,000 00	134,897 00
„ 10	Duncan Macdonald.....	1st Decr., 1870	365,920 00	30,850 00	138,000 00	227,920 00
„ 11	Davis, Grant & Sutherland	1st Nov., 1869	61,713 00	.....	61,713 00	.....
„ 12	Sumner & Somers	„ „	597,600 00	.....	551,000 00	46,600 00
„ 13	W. E. Macdonald & Co...	25th May, 1870	934,933 00	.....	384,000 00	550,933 00
„ 14	Nielson & McGaw.....	„ „	245,475 00	.....	146,000 00	99,475 00
„ 15	J. B. Bertrand & Co.....	15th June, 1870	363,250 00	.....	218,000 00	145,250 00
„ 16	King & Gough	25th May, 1870	206,000 00	.....	54,000 00	152,000 00
„ 17	S. Parker Tuck	15th June, 1870	440,000 00	.....	95,000 00	345,000 00
„ 18	Robt. H. McGreevy.....	8th July, 1870	648,600 00	.....	131,000 00	517,600 00
„ 19	Thomas Boggs & Co.	15th June, 1870	395,733 00	.....	131,000 00	264,733 00
„ 20	Brown, Brooks & Ryan...	24th Sept., 1870	642,854 00	.....	98,000 00	544,854 00
„ 21	Patrick Purcell	1st Decr., 1870	483,195 00	.....	113,000 00	370,195 00
„ 22	C. Cummings & Co.	„ „	331,000 00	.....	71,000 00	260,000 00
„ 23	Sutherland, Grant & Co...	„ „	276,750 00	.....	126,000 00	150,750 00
			9,385,078 00	.....	4,874,713 00	4,510,365 00
	ADD:—Value of work done by former Contractors		234,443 00	234,443 00	234,443 00	
			9,619,521 00	.....	5,109,156 00	4,510,365 00
	DEDUCT:—Refund for materials delivered on Section No. 5 by E. Haycock, and sold to Alex. McDonell & Co.		.....	.....	2,530 00	
					5,106,626 00	

APPEN

LIST of Engineers and other Staff employed on Sections of the Intercolonial Railway, as per Pay Rolls for January, 1871.

No. of Section.	Names.	Capacity.	Salaries.	Salaries.	Total.
				$ cts.	$ cts.
		St. Lawrence District.			
Rimouski Office.	Saml. Hazlewood .	District Engineer	.....	3,600 00	
	A. W. Edmonds ..	Draughtsman.....	.....	720 00	
	W. McCarthy	Rodman.....	.....	600 00	
Section No. 1...	L. G. Bell	Divisional Engineer.....	.....	2,000 00	
	C. McNab.....	Rodman	.....	600 00	
Section No. 2...	J. R. Macdonell ..	Divisional Engineer.....	.....	2,000 00	
	E. G. Powell	Rodman	.....	600 00	
	A. R. Pinsoneault.	,, ...	.....	600 00	
	Wm. Patterson ...	Inspector of Masonry ...	$80 per month ..		
Section No. 5...	R. McLennan	Divisional Engineer	.....	2,000 00	
	L. Chandler	Assistant Engineer.....	.....	1,100 00	
	W. McPhilips	Rodman	.....	600 00	
	Wm. Dickinson...	,, ...	.....	600 00	
	Y. M. Quigley....	Inspector of Masonry ...	$80 per month ..		
Section No. 8...	John Lindsay	Divisional Engineer.....	.....	1,800 00	
	W. Ireland.....	Rodman.....	.....	600 00	
Section No. 13..	H. J. Cambie	Divisional Engineer.....	.....	2,000 00	
	W. Murdock	Assistant Engineer	.....	1,100 00	
	J. J. McGee... ..	,, ...	.....	900 00	
	A. Wilson.....	Rodman	.....	600 00	
	S. Y. Kint	,, ...	.....	480 00	
	J. W. Scott	Inspector of Masonry ...	$80 per month ..		
Section No. 14 ..	Henry Carre.....	Divisional Engineer.....	.....	1,700 00	
	J. W. Taylor	Assistant ,, ...	.....	900 00	
	H. F. Forrest.....	Acting ,, ...	.....	600 00	
	L. N. Rheaume...	Rodman	....	480 00	
					26,480 00
		Restigouche District.			
Dalhousie Office.	Marcus Smith ...	District Engineer	.....	3,600 00	
	Chas. Blackwell ..	Assistant ,, ...	.....	1,800 00	
	R. C. Harris.....	,, ,, ...	.....	1,100 00	
	H. Matthews.....	Draughtsman.....	....	720 00	
	G. P. Brophy.....	,, ...	.....	720 00	
Section No. 17..	W. G. Bellairs....	Divisional Engineer.....	.....	1,700 00	
	J. F. Darwall ...	Assistant ,, ...	.....	900 00	
	W. E. Tisdale	Rodman.....	.....	480 00	
	C. Nicholle.....	,, ...	.....	480 00	
Section No. 18...	W. G. Thompson .	Divisional Engineer.....	.....	1,700 00	
	L. B. Hamlin.....	Assistant ,, ...	.....	900 00	
	C. H. Morse.....	Rodman.....	.....	480 00	
	D. McMillin.....	,, ...	.....	480 00	
		Carried forward.....	.....	$15,060 00	$26,480 00

DIX E.

LIST of Engineers and other Staff employed on Sections of the Intercolonial Railway, in force at the 1st April, 1872.

No. of Section.	Names.	Capacity.	Salaries.	Salaries.	Total.
				$ cts.	$ cts.
		St. Lawrence District.			
Rimouski Office.	Saml. Hazlewood .	District Engineer.	. . . . .	3,600 00	
	Geo. P. Bliss	Draughtsman	. . . . .	900 00	
	W. B. Hazlewood.	Clerk	. . . . .	600 00	
Sections Nos. 1 and 2	H. S. Langton. . . .	Assistant Engineer.	. . . . .	1,200 00	
Section No. 5. . .	J. R. Macdonell . .	Divisional Engineer	. . . . .	2,000 00	
	J. B. Brophy	Assistant ,, ...	. . . . .	1,200 00	
	Wm. Dickinson. . .	Rodman	. . . . .	600 00	
	J. Hunter	Inspector of Masonry . . .	$80 per month . .		
	Y. M. Quigley. . . .	,, ,, . . .	,, . .		
Section No. 13. .	H. J. Cambie	Divisional Engineer. . . .	. . . . .	2,000 00	
	J. J. McGee	Assistant ,, ...	. . . . .	1,200 00	
	Wm. McCarthy . .	,, ,, ...	. . . . .	1,200 00	
	Aug. Wilson	Rodman	. . . . .	600 00	
	S. Y. Kint	,, ...	. . . . .	600 00	
	J. H. Scott.	Inspector of Masonry . . .	$80 per month . .		
	Wm. Burt.	,, ,, . . .	,, . .		
Section No. 14. .	John Lindsay	Divisional Engineer. . . .	. . . . .	2,000 00	
	T. D. Taylor.	Assistant ,, ...	. . . . .	1,200 00	
	J. E. Papillon	Rodman	. . . . .	600 00	
	W. Patterson	Inspector of Masonry . . .	$80 per month . .		
	G. Cunningham. . .	,, ,, . . .	,, . .		19,500 00
		Restigouche District.			
Dalhousie Office.	L. G. Bell.	District Engineer	. . . . .	3,600 00	
	R. C. Harris.	Assistant ,, ...	. . . . .	1,200 00	
Section No. 17. .	W. G. Bellairs. . . .	Divisional Engineer.	. . . . .	2,000 00	
	W. E. Tisdale	2nd Assistant Engineer. .	. . . . .	900 00	
	W. F. Gouin	Rodman.	. . . . .	600 00	
	J. W. Imley.	Inspector of Masonry . . .	$80 per month . .		
Section No. 18. .	Peter Grant	Divisional Engineer.	. . . . .	1,500 00	
	L. B. Hamlin	Assistant ,, ...	. . . . .	1,200 00	
	G. R. L. Fellows .	,, ,, ...	. . . . .	1,200 00	
	C. H. Morse.	Rodman.	. . . . .	600 00	
Sections Nos. 17 18 and 19.	E. C. Ennis	Inspector Crib Wharf. . .	$80 per month . .		
		Carried forward	. . . . .	$12,800 00	$19,500 00

LIST of Engineers and other Staff employed on Sections of the Intercolonial Railway, as per Pay Rolls for January, 1871.—*Continued.*

No. of Section.	Names.	Capacity.	Salaries.	Salaries.	Total.
				$ cts.	$ cts.
		Brought forward	.....	15,060 00	26,480 00
		Restigouche District.—Continued.			
Section No. 19..	Peter Grant	Divisional Engineer.....	.....	1,950 00	
	John Jellett	Rodman.....	.....	600 00	
Section No. 3...	H. A. F. McLeod.	Divisional Engineer.....	.....	2,000 00	
	H. F. Donkin	Assistant ,, ...	.....	1,100 00	
	G. R. L. Fellowes.	Rodman.....	.....	600 00	
	E. J. Hutchinson .	,, ...	.....	600 00	
	Jas. Holmes	Inspector of Masonry ...	$80 per month ..		
Section No. 6...	Ed. Lawson	Divisional Engineer.....	.....	2,000 00	
	J. B. Hegan	Assistant ,, ...	.....	1,100 00	
	H. N. Ruttan	Rodman.....	.....	600 00	
	D. Sadler, jun	,, ...	.....	600 00	
Section No. 9...	Chas. Odell.....	Divisional Engineer.....	.....	2,000 00	
	F. Bolger.....	Assistant ,, ...	.....	1,100 00	
	W. E. Fish.....	Rodman.....	.....	600 00	
	J. F. McMillan...	,, ...	.....	600 00	
	J. Fotheringham..	Inspector of Masonry ...	$80 per month ..		
Section No. 15..	P. A. Peterson....	Divisional Engineer.....	.....	2,000 00	
	G. E. McLaughlin	Assistant ,, ...	.....	1,100 00	
	Wm. Mann.....	Rodman.....	.....	600 00	
	M. McL. Maingy.	,, ...	.....	600 00	
					34,810 00
		Miramichi District.			
Newcastle Office.	A. L. Light	District Engineer	.....	3,600 00	
	R. Stephens	Draughtsman.....	.....	720 00	
	J. Murphy	Clerk	.....	720 00	
Section No. 10..	W. M. Buck	Divisional Engineer.....	.....	2,000 00	
	J. C. Brown	Assistant ,, ...	.....	900 00	
	J. F. Wilson	Rodman.....	....	480 00	
	Z. J. Fowler.....	,, ...	.....	480 00	
	Jos. Williams	Inspector of Masonry ...			
Section No. 16..	J. W. Fitzgerald..	Divisional Engineer.....	.....	1,500 00	
	G. A. Garden.....	Assistant ,, ...	....	900 00	
	V. Nicholson	Rodman.....	.....	480 00	
	V. H. Steele.....	,, ...	.....	480 00	
Section No. 20..	W. R. Smellie ...	Divisional Engineer....	.....	2,000 00	
	Edwin Force... ..	Rodman.....	.....	600 00	
Section No. 21..	F. J. Lynch	Divisional Engineer.....	.....	1,500 00	
	E. W. Jarvis	Assistant ,, ...	.....	900 00	
	P. W. St. George.	Rodman.....	.....	480 00	
	H. S. Langton....	,, ...	.....	480 00	
		Carried forward.....	.....	$18,220 00	$61,290 00

LIST of Engineers and other Staff employed on Sections of the Intercolonial Railway, in force at the 1st April, 1872.—*Continued.*

No. of Section.	Names.	Capacity.	Salaries.	Salaries.	Total.
				$ cts.	$ cts.
	Brought forward.....	.....		12,800 00	19,500 00
	Restigouche District.—Continued.				
Section No. 19..	Peter Grant	Divisional Engineer.....	.....	1,000 00	
	J. Jellett.....	2nd Assistant Engineer..	.....	900 00	
	J. Holmes.....	Inspector of Masonry ...	$80 per motnh ..		
Section No. 3...	H. A. F. McLeod.	Divisional Engineer.....	.....	2,000 00	
	H. F. Donkin	Assistant ,, ...	.....	1,200 00	
	E. J. Hutchinson .	Rodman.....	.....	600 00	
	W. R. Falls	,, ...	.....	600 00	
Section No. 6...	Ed. Lawson	Divisional Engineer.....	.....	2,000 00	
	J. B. Hegan	Assistant ,, ...	.....	1,200 00	
	H. R. Ruttan.....	,, ,, ...	.....	1,200 00	
	James Sutherland.	Inspector of Masonry ...	$80 per month ..		
Section No. 9...	Chas. Odell.....	Divisional Engineer.....	.....	2,000 00	
	J. T. McMillan...	Rodman.....	.....	600 00	
Section No. 15..	P. A. Peterson ...	Divisional Engineer.....	.....	2,000 00	
	Wm. Mann	Rodman.....	.....	600 00	
	J. Fotheringham..	Inspector of Masonry ...	$80 per month ..		
					28,700 00
	Miramichi District.				
Newcastle Office.	A. L. Light	District Engineer	.....	3,600 00	
	S. G. Nixon	Draughtsman.....	.....	900 00	
	L. R. Jones	Clerk	....	600 00	
	Jos. Williams	Inspector of Masonry ...	$80 per month ..		
Section No. 10..	W. M. Buck.....	Divisional Engineer.....	.....	2,000 00	
	J. C. Brown.....	Assistant ,, ...	.....	1,200 00	
	J. F. Wilson	Rodman.....	.....	600 00	
	Z. J. Fowler.....	,, ...	.....	600 00	
Section No. 16..	J. W. Fitzgerald..	Divisional Engineer.....	.....	2,000 00	
	G. H. Garden	Assistant ,, ...	....	1,200 00	
	V. Nicholson	Rodman.....	.....	600 00	
	V. H. Steele.....	,, ...	.....	600 00	
Section No. 20..	W. R. Smellie	Divisional Engineer... .	.....	2,000 00	
	Edwin Force.....	Rodman.....	.....	600 00	
	Hugh Holt	Inspector of Masonry ...	$80 per month ..		
	J. D. Macdonald..	Inspector of Timber.....	,, ..		
Section No. 21..	F. J. Lynch	Divisional Engineer	.....	2,000 00	
	J. Cadman	Assistant ,, ...	....	1,200 00	
	J. W. Scott	Rodman.....	.....	600 00	
	W. Mattheson	,, ...	.....	600 00	
	Wm. Sultz	Inspector of Masonry ...	$80 per month ..		
	Carried forward.....	.....		$20,900 00	$48,200 00

LIST of Engineers and other Staff employed on Sections of the Intercolonial Railway, as per Pay Rolls for January, 1871.—*Continued.*

No. of Section.	Names.	Capacity.	Salaries.	Salaries.	Total.
				$ cts.	$ cts.
	Brought forward.....	....		18,220 00	61,290 00
	Miramichi District.—Continued.				
Section No. 22..	W. J. Crossdale ..	Divisional Engineer.....	.....	1,500 00	
	W. Gossip, jun. ..	Assistant ,, ...	.....	900 00	
	J. A. Dickey	Rodman.....	.....	480 00	
	M. W. Maynard..	,, ...	.....	480 00	
Section No. 23..	C. Schruber	Engineer	.....	3,000 00	
	E. A. Wilmot	Assistant Engineer.....	.....	900 00	
	J. M. Kinnear....	Rodman.....	.....	480 00	
	A. C. Schurman ..	,, ...	.....	480 00	
					26,440 00
	Nova Scotia District.				
Truro Office	W. H. Tremaine..	District Engineer	... .	3,600 00	
	H. P. Bell.....	Assistant ,, ...	.....	1,100 00	
	H. A. Gray	Draughtsman.....	.....	720 00	
	C. E. Perry	,, ...	.....	720 00	
Section No. 11..	J. D. Macdonald..	Clerk of Works....	$60 per month ..		
Section No. 4...	Geo. H. Henshaw.	Divisional Engineer.....	.....	2,000 00	
	J. R. Smith	Assistant ,, ...	.....	1,100 00	
	J. A. Creighton ..	Rodman..... ...	.....	600 00	
	J. S. Delaney.....	,, ...	.....	600 00	
	R. Sutherland	Inspector of Masonry ...	$80 per month ..		
Section No. 7...	T. S. Rubidge	Divisional Engineer.....	.....	2,000 00	
	A. J. Hill	Assistant ,, ...	.....	1,100 00	
	P. S. Archibald...	Rodman.....	.....	600 00	
	G. A. Bayne.....	,, ...	.....	600 00	
	R. Scott.....	Inspector of Masonry ...	$80 per month ..		
Section No. 12..	Wm. Hagen	Divisional Engineer.....	.....	2,000 00	
	E. H. Keating....	Assistant ,, ...	.....	1,100 00	
	D. S. Daggett	Rodman.....	.....	600 00	
	J. N. Archibald ..	,, ...	.....	600 00	
	A. McKay	Inspector of Masonry ...			
					19,040 00
					106,770 00
Paymaster.....	W. H. Stevenson .	Paymaster.....	....	1,200 00	
	J. H. Hayes	Assistant Paymaster	....	600 00	
	A. McDougall	Paymaster.....	.....	1,200 00	
	H. W. McCann...	,, ...	.....	1,200 00	
	R. B. Cutler.....	Assistant Paymaster	.....	600 00	
					4,800 00
	Carried forward.....	.....	.....	.....	$111,570 00

LIST of Engineers and other Staff employed on Sections of the Intercolonial Railway, in force at the 1st April, 1872.—*Continued.*

No. of Section.	Names.	Capacity.	Salaries.	Salaries.	Total.
				$ cts.	$ cts.
		Brought forward		20,900 00	48,200 00
		Miramichi District.—Continued.			
Section No. 22..	W. J. Crossdale ..	Divisional Engineer		2,000 00	
	Wm. Gossip, jun..	Assistant ,,		1,200 00	
	M. W. Maynard..	Rodman		600 00	
	A. Sinclair	,,		600 00	
Section No. 23..	C. Blackwell	Divisional Engineer		2,000 00	
	E. A. Wilmot	Assistant ,,		1,200 00	
	J. M. Kinnear...	Rodman		600 00	
	A. F. Johnston ...	,,		600 00	
	Thos. O. Regan...	Inspector of Masonry ...	$80 per month ..		
Moncton Buildings	J. Murphy .	Inspector	$80 per month ..		29,700 00
		Nova Scotia District.			
Amherst Office .	C. Schruber	District Engineer		3,600 00	
	E. H. Solomon ...	Clerk		600 00	
Section No. 4...	J. R. Smith	Assistant Engineer		1,200 00	
Section No. 7...	T. S. Archibald...	Assistant Engineer		1,200 00	
	R. Sutherland	Inspector of Masonry ...	$80 per month ..		
Section No. 12..	P. W. Archibald..			1,200 00	
	H. A. Gray			1,200 00	
	R. Scott				
	J. McRae				
	J. McPherson				
	Alex. McKay				
	E. J. Purdy	Fence and Tie Inspector.	$50 per month ..		9,000 00
					$86,900 00
Paymaster	W. H. Stevenson .	Paymaster		1,500 00	
	J. A. Hayes	Assistant Paymaster		600 00	
	H. W. McCann...	Paymaster		1,500 00	
	R. B. Cutler	Assistant Paymaster		600 00	4,200 00
		Carried forward			$91,100 00

LIST of Engineers and other Staff employed on Sections of the Intercolonial Railway, as per Pay Rolls for January, 1871.—*Continued.*

No. of Section.	Names.	Capacity.	Salaries.	Salaries.	Total.
				$ cts.	$ cts.
	Brought forward.....	.....	.....	.....	111,570 00
	Nova Scotia District.—Continued.				
Chief Engineer's Office.....	S. Fleming	Chief Engineer	.....	4,800 00	
	W. J. Forrest	Assistant Engineer.....	.....	1,800 00	
	D. Simmes	,, ,, ...	.....	1,100 00	
	T. R. Burpé.....	Secretary.....	.....	800 00	
				.....	8,500 00
					$120,070 00
Add—Amount of Supplies to the Staff on nine sections of the line, up to the 31st May, 1871.....				.....	6,370 00
,, Aggregate amount of Salaries of Members of the Engineer's Staff whose services were dispensed with on 31st December, 1870.....				.....	38,000 00
					$164,440 00

NOTE.—The above Comparative Statements, based on the Annual Expenditure for Staff and Supplies for the year ending 31st December, 1870, and for Staff for the year commencing 1st April, 1872, shows an annual reduction of $63,740. The forward state of the works will enable the Commissioners to make additional reductions before the 1st April, 1873; and the annual estimated outlay of $100,700 will be very considerably reduced.

LIST of Engineers and other Staff employed on Sections of the Intercolonial Railway, in force at the 1st April, 1872.—*Continued.*

No. of Section.	Names.	Capacity.	Salaries.	Salaries.	Total.
				$ cts.	$ cts.
	Brought forward.....	.....	.....	.....	91,100 00
	Nova Scotia Distvict.—Continued.				
Chief Engineer's Office	S. Fleming	Chief Engineer.....	.....	4,800 00	
	W. J. Forrest.....	Assistant Engineer.....	.....	1,800 00	
	D. Simmes.....	,, ,, ...	.....	1,100 00	
	T. R. Burpé	Secretary.....	.....	1,000 00	
	A. M. Edmonds ..	Draughtsman.....	.....	900 00	
					9,600 00
					$100,700 00

RETURN

To an Address of the HOUSE OF COMMONS of the 18th instant; for Copies of all Correspondence, between the Government and all other parties, such as Engineers and Contractors, respecting the Intercolonial Railway Bridge to be constructed across the Miramichi River.

Respectfully submitted,

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF SECRETARY OF STATE,
OTTAWA, April 30th, 1872.

MIRAMICHI BRIDGE.

The Commissioners for the construction of the Intercolonial Railway beg to report to the Governor in Council upon the subject of the bridge across the Miramichi River, at Newcastle.

A report is appended from the Chief Engineer, explaining that the original soundings have been discovered to be erroneous, and that a satisfactory foundation cannot be obtained at the depth originally contemplated.

The Chief Engineer proposes an altered plan for the caissons, which will increase the cost of the work beyond the present contract price, it also involves an extra span of iron of 200 feet, which will cost about $19,000.

A letter is also appended from the Contractors, offering to perform the extra work shown on the plans for the sum of $81,322, but not binding themselves to complete the work for that sum.

The Commissioners, in a work of such magnitude and difficulty, and in which such serious errors have already been made by the Engineers, cannot take the responsibility of recommending that the plan now proposed by the Engineer should be adopted.

Looking to the varying thickness of the vein of hard pan upon which the foundations of the piers must rest, and the great depth and quality of the material which lies between the hard pan and the rock, the Commissioners are of opinion that before proceeding with the works, it is desirable to have the professional opinion of eminent Engineers, whose judgment would be universally looked upon as sound, upon a matter of such great importance.

They, therefore, recommend that at least two Engineers of eminence be consulted as to the whole question of these foundations, and the best course to be pursued.

A. WALSH.
C. J. BRYDGES.

Ottawa, January 13th, 1872.

CHIEF ENGINEER'S LETTER.

OTTAWA, January 13, 1872.

SIR,—In submitting the plans of the Miramichi Bridges for tenders, I had printed and published all the information in my possession respecting the nature of the works and the character of the rivers, and which was considered necessary to enable intending contractors to form a correct idea of the magnitude and value of the work about to be undertaken.

The information then given was believed to be perfectly correct in every particular, as far as it went.

On this information tenders were received, and a contract was entered into with Messrs. Brown, Brooks & Ryan to complete Section 20 of the Railway, the chief works on which are the piers, abutments, and approaches of the two bridges across the south-west and nort-west branches of the Miramichi.

The contract sum is $642,854. The contract was entered into in September, 1870.

The following spring it was discovered that the nature of the material in the beds of the two rivers was different from what it was supposed to be previous to the letting of the contract.

Although the beds of both rivers turned out to be different, that of the south-west branch did not, in the opinion of the undersigned, necessitate any change in the original plan of bridge, or the mode of constructing the foundations of piers and abutments, the contractors were, therefore, directed to proceed with the works on this bridge, and they have during the whole of the past season been engaged thereon.

The bottom of the north-west river proving treacherous, the contractors were directed to postpone operations until a thorough examination could be made.

Since then a complete series of borings have been sunk in the river bed, by which it would appear that the stratum upon which it was intended to found the piers and abutments, is not rock, as originally supposed, but a bed of gravel of varying thickness, under which there is a great depth of silt before the rock is reached.

The circumstances of the case proving so seriously different to what was originally supposed, it became necessary to reconsider the whole plan of spanning the river; and the undersigned, after giving the subject his best attention, has arrived at the conclusion that it would be advisable to make the following changes, viz.:—

1st. To make the bridge with six spans of 200 feet instead of five, in order to secure the founding of the two abutments on the solid rock which underlies the banks of the river.

2nd. To enlarge the base of the five piers in order to distribute the weight over a greater area of the gravel bed above referred to (this would not have been necessary had the supporting stratum been rock as originally supposed).

I have submitted the revised plan to the contractors, who are now in town, and have requested them to state the terms upon which they will be prepared to carry it into execution.

I enclose the Contractors' reply; they are prepared to carry out the revised plan for the sum of $81,322, over and above the contract amount.

I have already stated, verbally, to the Commissioners, that in my opinion the work should be satisfactorily completed on the altered plan for a smaller extra price.

I am, &c.,

Your obedient servant,

SANDFORD FLEMING,
Chief Engineer.

Ralph Jones, Esq.,
Secretary.

CONTRACTORS' (SECTION 20) LETTER.

OTTAWA, 13th January, 1872.

SIR,—In reply to ours of yesterday in relation to the changes and extra work required on the bridges of the North-West Miramichi River, in which you state that the Commissioners want to have a distinct understanding, and that they will expect us to name a lump sum for the extra work which is referred to in connection therewith, and for the changes required by the absence of foundations on the plan as originally contracted for at the depths shewn on such plan.

We have examined the new plans which you have prepared, shewing the changes required, and find that they involve very considerable expense as well as risk, and we hesitate to assume the risk of the contingencies which may arise from the altered circumstances, and plans, but would prefer that our original contract should have been adhered to; the Government paying us for any extra work that they call upon us to perform, as you at present propose to do.

When we took the contract originally, we took it, as you are aware, upon the faith of the borings ascertained, and soundings by pile-driving by your officers, and the plans submitted by you. The work on that basis we have been always ready to do, and as circumstances now require a departure from the original plan, we believe that the fairest way would be, as well for the Government as for ourselves, that as soon as the work was completed, to pay us for the extra work actually performed, this plan would be a safe one for us, would avoid the risk of unforseen contingencies, and be fair to the Government, as they would then only have to pay for the extra work actually done; as, however, the Commissioners are desirous that we should make a specific offer, and as we are anxious, so far as we can with safety, to meet their wishes, we will agree to construct the north-west bridge on the new plan submitted to us for an additional sum of $81,322 over our original contract price therefor, on the following conditions, viz. :—

1st. That as there must, with such a work, be a degree of uncertainty until the work is completed, if the plans and specifications now submitted require to be departed from, and such departure involves extra cost to us, we shall expect to be compensated therefor.

2nd. We also wish the privilege of raising the grade across the point, and the masonry on said bridge, to a height not exceeding four feet, at our own expense, should we think it advisable so to do.

We remain, Sir,

Your obedient servants,

BROWN, BROOKS, AND RYAN

Sandford Fleming, Esq.,
Chief Engineer, Intercolonial Railway.

ORDER IN COUNCIL.

Copy of a Report of the Committee of the Honourable the Privy Council, approved by His Excellency the Governor General in Council on the 10th January, 1872.

The Committee of Council have had under consideration a Memorandum dated 13th January, 1872, from the Intercolonial Railway Commissioners, on the subject of the Bridge over the Miramichi River at Newcastle, N. B., and on the recommendation of the Hon. the Minister of Public Works, they advise that the suggestion submitted in the said memorandum, to the effect that at least two Engineers of eminence should be con-

sulted as to the whole question, and the best course to be pursued, be approved and acted on.

Certified. WM. H. LEE,
Clerk Privy Council.

To the Honorable
The Commissioners
Intercolonial Railway, &c., &c., &c.

APPOINTMENT OF CONSULTING ENGINEERS.

Commissioners Meeting 29th January, 1872.

Resolved,—That Messrs. J. Page and C. S. Gzowski, be appointed to report upon the plans for the foundations of the Miramichi Bridge.

Letters, of which the following is a copy, were then written to Messrs. Page and Gzowski :—

OTTAWA, January 31st, 1872.

SIR,—I beg to inform you, that you have been appointed by the Commissioners for the construction of the Intercolonial, and with the approval of the Government, to consult with Mr. Gzowski, C. E., upon the plans for the foundations of the bridges across the two branches of the Miramichi River.

Difficulties have been met with in the foundations, and before adopting the plans which have latterly been prepared, it is desired that they should be carefully examined and reported by Mr. Gzowski and yourself.

You are requested to consider the contract made for the piers of this bridge when the original plans were made, and the effect upon the amount of that contract of the altered plans which may ultimately be decided upon.

S. Fleming, Esq., will afford you full information as to the result of the examination of the bed of the river, and shew you the plans of the foundations, piers and superstructure.

It is suggested that you confer with the Contractors, and hear whatever information they can give you.

You will be good enough to report as to the plan which you consider most desirable to meet the difficulties which have been met with, both with reference to the permanent stability of the bridge, and the cost and time of its construction.

If you can meet Mr. Gzowski and Mr. Fleming next week, in this City (Ottawa), a few days will probably enable you to make your report. Every information you require will be afforded to you.

I am, Sir,
Your obedient servant,
RALPH JONES,
Secretary.

Letter addressed to S. Fleming, Chief Engineer.

OTTAWA, February 1st, 1872.

DEAR SIR,—I am instructed to hand you copy of a letter which has been addressed to Mr. Page and Mr. Gzowski, requesting them to confer with you, and report upon the plans for the Miramichi Bridge.

I am, dear Sir,
Yours truly,
RALPH JONES,
Secretary.

The following letter received from Mr. Page, declining to act :—

OTTAWA, 2nd February, 1872.

SIR,—I duly received your letter of the 31st ult., requesting me to consult with Mr. Gzowski, C. E., in reference to certain difficulties which have been met with in the construction of certain bridges over the Miramichi River, Intercolonial Railway.

In reply, I beg to state that my time is fully occupied in the preparation of several important Reports, which must be completed before the meeting of Parliament; the pressure of my official duties has also been considerably increased by the recent and severe illness of one of my chief assistants.

I regret, therefore, that I am obliged to decline the reference made by the Board of Railway Commissioners, as I feel certain that under the circumstances it would be impossible for me to give the question that careful consideration which its importance requires.

I have the honor to be, Sir,
Your obedient servant,

JOHN PAGE,
C. E., Public Works.

Ralph Jones, Esq.,
Secretary, Intercolonial Ry. Commissioners,
Ottawa.

The Commissioners met.

Ordered,—That Samuel Keefer, Esq., C. E., be appointed in place of Mr. Page, and that a similar letter as that written Messrs. Page and Gzowski be written him.

The following letters were received from Messrs. Keefer and Gzowski :—

BROCKVILLE, 5th February, 1872.

SIR,—I have the honor to acknowledge the receipt of your letter of the 3rd inst., notifying me of my appointment, in conjunction with Mr. Gzowski, to report upon the plans for the foundations of the bridges over the two branches of the Miramichi River.

I shall be prepared to attend to this duty as soon as the necessary arrangements can be made with Mr. Gzowski for meeting him and Mr. Fleming at Ottawa, I will write to Mr. Gzowski on this subject to-day.

Mr. Brooks, the Contractor, who resides here, is expected home in a day or two, and can then be called upon to give the necessary information.

I have the honor to be, Sir,
Your obedient servant,

SAMUEL KEEFER.

Ralph Jones, Esq.,
Secretary, Intercolonial Ry. Commissioners.

TORONTO, February 6th, 1872.

SIR,—I beg to acknowledge receipt of your letter of the 31st ultimo, and to say that I have been in communication with Mr. Samuel Keefer, and arranged to be in Ottawa on Thursday next.

As it is very important for me to return as soon as possible, I shall be much obliged by you having all the information and papers that you propose submitting to us in readiness.

I am, Sir,
Your obedient servant,
G. S. GZOWSKI.

Ralph Jones, Esq.,
Secretary, Intercolonial Ry. Commissioners,
Ottawa.

MESSRS. KEEFER AND GZOWSKI'S REPORT AND PLAN.

OTTAWA, February 15th, 1872.

SIR,—In compliance with the request of the Commissioners for the construction of the Intercolonial Railway, as contained in your letters of the 31st January and 3rd February, we have made a careful examination of the contract plans for the bridges to be erected over the two branches of the Miramichi River, and the modifications thereof recently proposed by the Chief Engineer.

We have also seen the sections of the borings lately taken in the bed of the river and have received the explanations and views both of the Engineer and the Contractors respecting the carrying out of the original as well as of the modified plans, and have now the honor to report thereon for the information of the Commissioners.

1. The Contract Plans.

These plans represent a peculiar form of inverted caisson, made of cribwork, and intended to be sunk through some nineteen (19) feet of silt and sand forming the bed of the river, down to the solid rock which is represented to be at a level varying from forty to fifty feet below the surface of the water.

This caisson is divided into separate chambers, some of which are to be filled with concrete while sinking proceeds, and others after it is sunk, the latter forming the means of communication with the bottom during the process of sinking, through which the material to be excavated from within the cutting edge of the caisson is to be elevated.

When sunk to the bottom, the caisson will thus be entirely filled with concrete, and form a mass of timber and concrete, on which the masonry of the piers will commence at a level of four feet under low-water.

Since these plans, however, were adopted, further examination of the bed of the river by borings and driving of piles, reveal the fact, that what was supposed to be rock, was only a bed of gravel and sand, varying from five and a half ($5\frac{1}{2}$) to twelve (12) feet in thickness, resting on a deep bed of fine blue sandy clay, as shewn in the sections submitted to us; and that in the north-west branch the rock is from ninety-two (92) to one hundred and twenty-seven (127) feet below the datum of high water.

The modifications of this plan before referred to consist in removing the S. E. abutment of the N. W. branch, two hundred (200) feet landward, so as to place it on the solid bank, where it will be founded upon rock, building an additional pier at the place it was intended to occupy, thus adding another span of two hundred (200) feet to the bridge, and in giving more batter to the sides of the caisson, in order to spread the weight over a larger bearing surface.

In the south-west branch two caissons have been partially sunk, though under so many difficulties, that the Contractors were obliged to suspend further operations, until more efficient appliances could be procured for sinking them.

The operation of sinking an inverted caisson, even with the aid of the pneumatic process, is one that requires the utmost care and attention to keep the cutting edges

uniformly free, so that no unequal sinking shall take place. At the Brooklyn caisson of the suspension bridge, now in course of erection across the East River, where this process was conducted in the most thorough manner, and without limitation as to cost, experience has shown, that owing to the difficulty of preserving an uniform bearing at the cutting edge, and to the unequal pressure upon the sides, the caisson was subject to sudden, and (within certain limits) to uncontrollable movements, not entirely to be guarded against, and that when finally sunk it had swerved two feet from its proper position.

In the plans under consideration the sinking will be still more difficult and uncertain. The dredge, or elevator, working perpendicularly in wells of limited dimensions, can only be brought to act in the middle of the chamber, and not at the edges, where it is most wanted to regulate the descent of the caisson. This can only be done by divers working in the dark, groping around the edges, and removing the material from thence towards the middle of the chamber.

We are, therefore, of opinion that it will be extremely difficult, if not altogether impossible, to sink these caissons to the proper depth, without resorting to the pneumatic process—a process attended with so much expense and delay, that we cannot recommend its adoption.

Moreover, we think it advisable to guard against the marine worm, usually found in tideways, and not to expose any portion of the foundation timbers to its depredations.

The Chief Engineer has communicated to us the particulars of a very satisfactory test which he has applied to the stratum of gravel underlying the bed of the river, to ascertain its supporting power, or ability to sustain the weight of the pier, the superstructure, and the moving load. It consisted in loading an iron rod of three inches diameter, passed through a hollow cylinder, down to the surface of the gravel, with a weight of fourteen hundred pounds (1,400 lbs.), equal to a pressure of two hundred pounds (200 lbs.) to the square inch. This direct test was applied to the thinnest, and consequently the weakest part of the gravel bed, and yet at this point the distribution of such a weight over the entire area of the base of the pier would be many times greater than the entire weight of the structure and its moving load. This fact relieves us of any anxiety we might otherwise have felt as to the possibility of obtaining a reliable foundation short of the solid rock.

Taking then into consideration all the facts which have been communicated to us, and the information we have received on this subject, and basing our recommendations thereon, we find no difficulty in coming to an agreement upon the best plan for meeting the emergency. It consists of the ordinary process of preparing a pile foundation and building upon it, in a direct caisson, the masonry of the pier from the bed of the river, and protecting the base by rip-rap.

2nd. The plan suggested is as follows :—

Two rows of piles, the inner one of square timber, 12 × 12 inches, and the outer ones round, but such as would square 12 × 12 inches, to be driven close together, completely enclosing the space occupied by base of the pier, estimated to cover an area of fourteen hundred and forty-three (1,443) superficial feet. The outer row to be driven first, then two rows of walling pieces, 6 × 12 inches, to be bolted on the inner side of the round piles, one at the bottom of the river, and the other near the surface of the water, to act as guides for driving the square piles.

The piles are to be driven through the black mud and sand, and from two to three feet into the stratum of gravel shown by the borings taken under your Engineer's direction, to exist at an average depth of nineteen (19) feet below the bottom of the river.

Within the space enclosed by this double row of piles, interior piles are to be driven to the same depth (or until refusal), three feet apart from centre to centre in both directions, longitudinally and transversely.

These piles, as well as the square ones forming the sheet piling, or inner lining of the enclosure, are to be cut off level with the bottom of the river. The earth between the heads of the piles for a depth of two feet is to be removed, and the space filled in with concrete, and levelled off flush with their tops.

Upon this foundation so prepared, a caisson is to be placed, built with a double bottom (consisting of two thicknesses of squared timber, laid close together, and at right angles with each other) framed to the required form and dimensions, bolted, caulked, and pitched. On this double bottom there is first to be laid, within the caissons and covering its entire surface, a course of two feet of concrete as a foundation for the masonry, which is to be built with two footing courses, each two feet in thickness. The first course to be of the full width of the caisson, the second course with an offset of one foot on all sides, and from this point upwards with another offset of one foot will start the masonry of the pier with its proper batter.

The outer round piles to be left standing until the pier is built, or until the caisson is firmly bedded on the pile foundation, to serve as guide-piles for holding the caisson in place while afloat and receiving the masonry. When the pier is built the outer round piles to be cut off, and the caisson to be removed as far below the surface of lowest water as the Engineer may consider necessary.

The piers to be protected by rip-rap extending sufficiently around the base to preserve them completely from the action of the tide and current.

Our recommendation of this mode of preparing the foundation extends to all the piers of the bridge over the north-west channel, and to the three piers not yet commenced on the south-west branch.

With respect to the piers E. and F. in the latter, we suggest that in as much as the work upon them is now so far advanced, they should be completed on the plan upon which they were commenced, but that great care should be taken in dredging out the inverted caissons, to remove all material from the cutting edges, in order that they may go down to their intended position evenly and level, and when they reach that depth they should be loaded with as many stones as can be placed upon them, and remain so loaded as long as possible, postponing the final completion of the masonry of these two piers to the last.

We consider that this plan can be carried out with certainty as to its results, and with the greatest expedition, that it will afford a safe and reliable foundation at the least expenditure, and that both time and money may be saved by its adoption.

The work at all the piers can be carried on simultaneously, as only simple and inexpensive machinery is required for its execution, which can be multiplied to any required extent.

The quantity of materials and character of the work to be performed in getting them in place, by this plan, are such in our judgment as should not add to the amount of the contract, but, on the contrary, tend to reduce it. And we think that the Contractors might well afford to complete the whole of the work at their contract price, without any additional charge for the change of plan.

We have the honor to be, Sir,

Your obedient servants,

(Signed,) SAMUEL KEEFER,
C. S. GZOWSKI.

CHIEF ENGINEER'S LETTER.

OTTAWA, February 22nd, 1872.

DEAR SIR,—When I addressed you on the 13th of last month, on the subject of the Miramichi Bridges, doubts were entertained respecting the stability of the foundation strata on which it was proposed to place the piers and abutments of the bridges over the north-west branch of the river. The same doubts did not exist respecting the character of the river bed of the south-west branch.

The Contractors had been directed to proceed with the original contract design on the latter branch, it had in fact during the whole of last summer been under execution, and had made considerable progress.

It became my duty to point out the course which I considered it most advisable to take with regard to the bridge over the north-west branch; and from the best information then in my possession, I considered that all doubts respecting the supporting power of the foundation strata, and the perfect safety and permanency of the whole structure would be set at rest by the adoption of two changes in the original contract plan. One change was to form an additional span at the south end of the Bridge, instead of a solid embankment, the other was to enlarge the base of the piers, in order to distribute the weight of the masonry and load over a greater area.

The Government and the Commissioners in view of the importance of the question, and desiring to set at rest all fears that might by any one be entertained, chiefly with respect to the stability of the foundation of the bridge, deemed it advisable to consult other Engineers on the subject. Messrs. Gzowski and Keefer were selected.

With the same object in view I instituted a series of experiments to ascertain by direct pressure the load which the foundation strata in the bed of the river would carry.

The first set of experiments were made at the proposed site of pier B, in the following manner :—

Iron tubes were sunk through the ice, water, and mud, to the bed of gravel at the depth at which the piers were proposed to be founded, viz.: about 52 feet under datum (extreme high water) within these tubes iron rods were passed, the object of the tubeing being to prevent friction on the sides of the rods in the material passed through, and thus allow perfectly free action. The rods were then loaded above the surface of the water with different weights, and allowed to remain loaded for different lengths of time. In this manner direct pressure was applied to the foundation stratum in the bed of the river and its supporting power ascertained. The soft material under the gravel bed was tested in a similar manner, and the results of these experiments as reported to me are as follows :—

Tests at site of pier B station 174 × 65.

End of rod 3 inches diameter = 7.06 square inches area.

Test No. 1. Saturday, 20th January.

On top of gravel, bottom of tubeing 52 feet below datum, point pressure 52.3 below datum, load applied including rods 1,000 pounds, continued till Monday 22nd ; time, 42 hours, no settlement.

This pressure equals 142 lbs. per square inch, without settlement.

Test No. 2. Monday, 22nd January.

On top same gravel, pressure purposely lowered 1 inch, tubeing 52 feet, point pressure 52.4, load applied including rods 1,400 pounds, continued till Tuesday, 23rd January ; time 24 hours, no settlement.

This pressure equals 200 lbs. per square inch, without settlement.

Tuesday 23rd. Bored through gravel, gradually changing to sand, 4 feet thick in all, to blue sandy clay, bored into same 2 feet 6 inches.

Test No. 3. Tuesday, 23rd January.

In blue sandy clay, bottom tubeing 58 feet, point pressure 58 feet 6 inches, load applied including rods 900 pounds, continued till Wednesday 24th ; time, 17 hours, without settlement,

This pressure equals 127 lbs. per square inch, without settlement.

Test No. 4. Wednesday, 24th January.

On same point, load increased to 1,000 pounds, continued till Thursday 25th ; time, 24 hours, without settlement.

This pressure equals 142 lbs. per square inch, without settlement.

Test No. 5. Thursday, 25th January.

Load further increased to 1,400 pounds, this weight settled rod $\frac{1}{10}$ of a foot, within one hour, continued till Saturday 27th ; time, 48 hours, without change.

In this case a settlement took place under a pressure of 200 lbs. per square inch, as above stated.

When I mention that the maximum pressure upon the base of the pier according to the contract plan *does not exceed 24 pounds per square inch*, and this includes the weight of the caissons, masonry, iron bridge, superstructure, and the heaviest moving trains, it seems clear that there would be no great risk in founding this particular pier exactly as originally designed, without enlarging the base or altering the form in any way,

Experiments similar to the above have been continued at the sites of all the other piers, but I have not as yet been placed in possession of the exact results. I have learned, however, by telegraph, that so far as the experiments have been tried, they have proved equally satisfactory.

I do not at all agree with Messrs. Gzowski and Keefer with regard to the difficulty in carrying into execution the original contract plans—with proper plant such as indicated in the information which I published for the guidance of intending contractors, before tenders were received, there would be no serious difficulty in carrying out the original plans in a perfectly satisfactory manner. There certainly cannot possibly be any greater difficulty now, than when the contract was first entered into.

With regard to the alternative plan brought forward for adoption by Messrs. Gzowski and Keefer, while I perceive in it certain merits, I feel at the same time constrained to say that it is open to grave objections, and I could not bring myself to advise the Government to hazard its adoption under the circumstances which exist at the place in question. I consider that the safety and permanency of the whole Bridge would be much better secured by the original contract plan carried into execution without any alteration whatever.

I am, &c., &c., &c.,

(Signed,) SANDFORD FLEMING,
Chief Engineer.

Ralph Jones, Esq.,
Secretary.

REPORT OF COMMISSIONERS—HON. ED. B. CHANDLER AND C. J. BRYDGES.

OTTAWA, February 23rd, 1872.

The Commissioners for the construction of the Intercolonial Railway beg to report to the Governor in Conncil upon the subject of the two bridges across the branches of the Miramichi river.

On the 13th January, 1872, the Commissioners reported upon this subject, enclosing a report from the Chief Engineer, and recommended that the whole question of these foundations should be submitted to the professional opinion of two eminent Engineers, and their advice obtained as to the best course to be pursued.

Council approved that recommendation, and Messrs. Samuel Keefer and C. S. Gzowski were selected.

The Commissioners now beg to enclose a copy of the Report, which they have received from those Engineers, a copy of it has been handed Mr. Fleming, who has addressed the accompanying letter to the Commissioners.

The undersigned recommend that the course proposed by Mr. Keefer and Gzowski be carried out, as they believe it will prove to be the least costly. and enable the work to be completed in a shorter time, than by the plan originally proposed.

(Signed,) ED. B. CHANDLER,
C. J. BRYDGES.

REPORT OF A. WALSH, CHAIRMAN.

OTTAWA, February 23rd, 1872.

The plans, specifications, and detailed information submitted to intending Contractors at the time tenders were invited for the construction of the Miramichi Bridges, indicated the depth at which rock would be found upon which to base the caissons.

After the tenders had been received, and a contract entered into with Messrs. Brown, Brooks and Ryan, it was ascertained that what was supposed, and represented to be rock, was a stratum of sand, and gravel, varying in thickness from five to twelve feet.

The discovery of this error as to the character of this stratum naturally created anxiety as to the sufficiency of the foundations, and to remove all doubt on this subject, the Commissioners under the authority of an order in Council, passed on the 16th January last, appointed C. S. Gzowski, Esq., C. E., and Samuel Keefer, Esq., C. E., to consult with the Chief Engineer of the Intercolonial Railway and the Contractors for the Bridges, and after such consultation to report their opinion upon the subject.

Messrs. Gzowski and Keefer accepted the appointment, and the result of their enquiries is embodied in their report of date 15th July inst., copy whereof is herewith submitted; in reference to the statements and recommendation contained in that report, the undersigned has the honor to submit his views to the Governor in Council.

In the Reports of Messrs. Gzowski and Keefer they state, "the Chief Engineer "has communicated to us the particulars of a very satisfactory test which he has applied "to the stratum of gravel underlying the bed of the river, to ascertain its supporting "power, or ability to support the weight of the pier, the superstructure and the moving "load; it consisted in loading an iron rod of three inches diameter, passed through a "hollow cylinder, down to the surface of the gravel, with a weight of fourteen hundred "pounds (1,400 lbs.) equal to a pressure of two hundred pounds (200 lbs.) to the square "inch, this direct test was applied to the thinnest and consequently the weakest part of "the gravel bed, and yet at this point, the distribution of such a weight over the entire "area of the base of the pier, would be many times greater than the entire weight of the "structure, and its moving load."

This fact relieves us of any anxiety we might otherwise have felt, as to the possibility of obtaining a reliable foundation short of the solid rock.

The Chief Engineer, in a letter of the 22nd February instant, gives the result of various tests applied to the stratum of gravel, and expresses a strong opinion as to the sufficiency of the foundations, and recommends the construction of the bridges upon the original plan.

As both the Chief Engineer and the consulting Engineers have declared the foundation sufficient, that branch of the inquiry is disposed of, and the works may now be prosecuted without further anxiety.

Messrs. Gzowski and Keefer then proceed to the discussion, and recommendation of an entirely different foundation for receiving the masonry to that specified in the contract of Messrs. Brown, Brooks and Ryan.

The documents being all before the Governor in Council, the undersigned deems it unnecessary in this Report to enter into a description either of the contract plan, or of that proposed in substitution, it will only be necessary to say that Messrs. Gzowski and Keefer as already stated, propose to substitute an entirely different mode of construction to that upon which the contract was let.

Messrs. Gzowski and Keefer describe at some length the difficulty and expense attending the sinking of the caissons in accordance with the contract plans, and without in any way expressing an unfavorable opinion as to the sufficiency of these plans, when faithfully carried out, appear to base their recommendation for a change of plan upon these questions of difficulty and expense; by reference to the documents submitted at the time the tenders were invited, it will be shewn that these difficulties and expenses were fully pointed out to intending contractors, and by reference to the letter of the Chief Engineer accompanying his estimate of the cost of the work, it will appear that a liberal

price was recommended (which recommendation was acted upon) to cover the unusual and extraordinary expense attending the execution of this contract.

The undersigned therefore submits, that not only have the Contractors not been subjected to unforseen difficulties or expenditure, but on the contrary, were the plans for the construction of these very important works entirely changed (as proposed), it would be quite competent for any or all of these persons who tendered for the work, to claim that, had their tender been invited upon the plan now proposed to be adopted, a very large saving to the country would have been effected.

The undersigned recommends that the Contractors be instructed to proceed with the earnest and vigorous prosecution of the works in accordance with their contract.

(Signed,) A. WALSH,
Commissioner.

ORDER IN COUNCIL.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council on the 26th February, 1872.

On a Report dated 24th February, 1872, from the Hon. the Minister of Public Works, stating that the Intercolonial Railway Commissioners having, under authority of the O. C. of 16th January last, submitted to Messrs. Keefer and Gzowski, Civil Engineers, the question connected with the construction of the Bridge over the Miramichi river, have obtained the opinion of those gentlemen, which opinion is submitted with that of Mr. Fleming, to whom that of Messrs. Keefer and Gzowski had been communicated.

That inasmuch as Messrs. Fleming, Keefer and Gzowski, agree as to the sufficiency of the stratum to support the Bridge, he, the Minister, is of opinion that the original plan under which the contract was awarded to Messrs. Brown, Brooks and Ryan, should be adhered to.

The Committee concur in the above report, and submit the same for your Excellency's approval.

Certified,

(Signed,) W. A. HIMSWORTH,
Asst. Clerk, Privy Council.

CHIEF ENGINEER'S LETTER.

OTTAWA, March 5th, 1872.

DEAR SIR,—Referring to my letter to you, dated January 13th, respecting the Miramichi bridges and changes in contract plans which I then suggested.

Referring also to my letter of February 22nd, on the same subject, also to the order in Council passed on the 26th February, as well as the explanations and remarks I had the honor to make at a recent meeting of the Privy Council.

Notwithstanding the satisfactory nature of the information obtained by the pressure tests referred to in my letter of February 22nd, I am of opinion that in order to secure that safety and durability, so desirable in a structure of so much importance, it would still be wise and prudent to construct the bridge over the north-west branch of the Miramichi with six spans, instead of five; to increase the base of the piers from 24 feet to 30 feet in width, to carry the two abutments to the rock, and found the solid work of the piers on the gravel stratum, without disturbing the latter in any way.

In my letter to you, dated January 13th, I enclosed a communication from the contractors in which they named $81,322, as the sum they would require in addition to

the contract sum to make the proposed alterations. This sum as I stated at the time, appeared to me greater than necessary.

The contractors are now in town ; I have learned from them the difficulties they apprehend in carrying out the changes proposed, particularly with regard to sinking the caissons with a considerably greater batter than originally intended, in order to give the increased base to the piers.

With the view of meeting these and other difficulties, I have, after duly considering the whole subject, submitted to the contractors a modification in the manner of forming the caissons required in the foundation works of the piers. By this modification, while the permanency of the work is enhanced, the difficulties to be looked for in executing the work are believed to be diminished, thus enabling the contractors to undertake the additional work at a much lower rate than they formerly proposed.

I enclose herewith my letter to the contractors, dated March 1st, and their reply thereto, from these letters it will be seen that the contractors are prepared to carry out the increased work, according to the amended plan, for the sum of $25,000, additional to their contract price.

A sketch of the amended plan of pier foundations is attached hereto, and the whole changes proposed may be generally described as follows, viz.:—

An additional pier to be built so as to give the bridge six span, instead of five. The foundations of all the five piers to be increased from 24 feet to 30 feet in width—the length of each to remain the same as before, viz. 56 feet—open caissons to be employed in forming the piers, instead of close caissons—all the mud and silt on the top of the gravel bed to be dredged out within each caisson, and the space so dredged out to be filled up with concrete and quarry rubble stones, in equal proportions, the latter to be bedded in the concrete and thoroughly incorporated with it, so as to make one solid monolithic mass, the whole length and width of the base of each pier, and in thickness equal to the mean depth of the silt and mud to be dredged. Over this six feet of concrete to be placed, and then the masonry of piers to be built with footings, as shown on the attached plan.

The line A B on the accompanying plan shows the underside of the masonry on the original contract plans ; all work above this line to be executed exactly as originally specified and intended.

On the completion of that portion of the piers under water, all the timber in caissons, etc., to be cut off as close as practicable to the top of the bed of concrete. After all the timber and false works are removed, a quantity of rip-rap, averaging 600 cubic yards to each pier, to be deposited as may be directed and as intended in the original plans and specifications.

The top of the masonry in both piers and abutments to be made as may be directed to suit the iron bridge superstructure now being manufactured by Clarke, Reeves & Co., and the height of both piers and abutments may be raised, not exceeding four feet, should it hereafter appear advisable so to do, in order to equalize the work by reducing the [illegible] cutting between this bridge and the south-west bridge.

In the event of the masonry of Piers being raised as referred to above, the same to be done only with the concurrence of the Commissioners and the Chief Engineer, and without any additional payment being made to, or claimed by the contractors.

The additional price asked by the contractors for executing in a satisfactory manner this amended plan, is so small compared with the magnitude of the work, the importance of securing the permanent stability of the structure and its completion, with as little delay as possible, that I recommend the proposal for favorable consideration.

I have given the whole subject my best consideration, and from the latest and best information received respecting all the difficulties of the case, I am satisfied that the course proposed and recommend is the best, having due regard to economy, safety, and durability.

I am, &c., &c., &c.,

(Signed,) SANDFORD FLEMING,
Chief Engineer,

Ralph Jones, Esq.,
Secretary.

Chief Engineer's Letter to Contractors.

Intercolonial Railway,
Office of the Chief Engineer,
Ottawa, March 1st, 1872.

Gentlemen,—In your letter to me, dated 13th January last, in reference to certain alterations then proposed by me respecting the north-west Miramichi bridge. You were prepared to undertake to carry out the work as proposed, increasing the width of the piers, and making the bridge for six spans instead of five, for the sum of $81,322. You then, and since, stated to me verbally, that you foresaw great difficulty in sinking the caissons with the increased batter, and hence the apparently large extra price you required to undertake the altered work, you also stated that a greater length of time would be required to finish the work.

I now submit to you a modified plan; an additional pier to be made; the base of all the piers to be increased from 24 feet to 30 feet in width, the length of the piers to remain the same, viz. 56 feet, and to meet any possible difficulties arising from the increased batter, open caissons to be used in forming the piers instead of close caissons—all the mud and silt to be dredged out within each caisson, and the space filled up with concrete and rubble stones in equal proportions, over this 6 feet of concrete to be placed, and then the masonry of piers to be started in footings as per plan.

Will you let me know on what terms you will undertake to carry out this modified plan assuming the same responsibilities as were placed upon you by the original contract. Be good enough also to state the least of extension of time you will require to have the work ready for the iron bridge superstructure.

I am, &c., &c., &c.,
(Signed,) Sandford Fleming.
Chief Engineer.

Messrs. Brown, Brooks & Ryan,
Contractors.

Letter from Contractors to Chief Engineer.

Ottawa, March 4th, 1872.

Sir,—We have considered the question of building the north-west branch of the Miramichi bridge, according to the modifications of the original plan, proposed by you to meet the difficulties of the case.

These modifications embrace an additional pier, so as to give six spans instead of five, and in order to place the two abutments on the rock.

It also embraces an alteration in the structure and composition of the caissons, and the widening of all the piers at the point where they rest on the gravel pan from 24 feet to 30 feet.

In other respects the essential points of the original designs are to be maintained.

We will undertake to do the work as described in this amended plan to your satisfaction and that of the Commissioners, ready for the superstructure, for the sum of $25,000 additional to our original contract price.

The time for completing the contract to be extended one season.

We remain, Sir,
Your obedient servants,
(Signed,) Brown, Brooks and Ryan.

Sandford Fleming, Esq.,
Chief Engineer, Intercolonial Railway,
Ottawa.

REPORT OF A. WALSH, CHAIRMAN.

OTTAWA, March 7th, 1872.

The undersigned has the honor to submit to the Governor in Council, Copies of correspondence in reference to the proposed railway bridges across the north-west branch of the Miramichi river, as under :—

" 1st. Letter from Sandford Fleming, Esq., Chief Engineer, to Messrs. Brown, " Brooks and Ryan, Contractors, dated 1st March inst."

" 2nd. Letter from Contractors in reply to above, dated 4th March instant."

" 3rd. Letter from the Chief Engineer to Ralph Jones, Secretary, dated 6th March " instant, with accompanying plan."

Upon receipt of these documents, the undersigned communicated with his colleagues, on the 6th inst., in the following words :—

" Fleming recommends following modifications north-west Miramichi bridge— " six spans instead of five—foundations of piers thirty feet wide instead of twenty-four " —open caissons instead of close, and mud and silt to be removed to top of gravel bed, " and space to bottom river filled with concrete and quarry rubble stone, in equal propor- " tions, to be thoroughly incorporated, making solid mass ; over this six feet of concrete, " and then start masonry ; change being substantially, additional span, enlargement of " foundations ; and solid mass concrete and rubble, same depth as old plan."

" Contractors assent to changes, agreeing to carry them out for additional twenty- " five thousand dollars, and extension time one year."

" By request of Council, I transmit this to you, and other Commissioners, for your " opinion, early decision being required."

The following replies were received :—

From the Hon. Mr. CHANDLER :—

" I concur in the proposed arrangement about the Miramichi bridges, as suggested " in your telegram of yesterday."

From C. J. BRYDGES, Esq. :—

" Your message received,—I have already expressed my agreement with the changes " from five to six spans, on the north-west branch ; I cannot take any responsibility in " regard to foundations as proposed by Fleming ; his present plan is an entire departure " from original ; if present plan is right, his original plan when he believed rock to be " where it was, was clearly wrong; I remain of opinion that the proper course is to make " pile foundations as proposed by the Engineers called in ; I believe that plan can be finished " for contract price now in existence, and done in this year and next. I do not believe " the plan now proposed can be completed in the same time, and I see no necessity for " paying twenty-five thousand dollars beyond what is requisite. I should fear removal " of bed of river to top of gravel bed, and placing of weights proposed of rubble stone " and concrete, would be liable to break through seam of gravel ; it would be more likely " to do so, than piles, which would consolidate present bed of river, and make a much " safer foundation. This is my judgement."

From the Hon. Mr. MCLELAN :—

" Message received,—I should adhere to five spans, enlarge foundations at base, " contracting all possible to point where masonry begins, that value of enlargement be " not lost in increased weight ; direct chief or section Engineer to estimate difference in " cost, open and close caissons, and enlargement of foundations, and require the rate of " progress on works to be satisfactory to Government, without naming a year's extension " of time."

The undersigned in a Report to the Governor in Council, dated 23rd February last, recommended that the Contractors for this Bridge, should be directed to proceed with the work in accordance with the contract plans, that report was made under the conviction that the tests applied to the stratum of gravel, and the concurrent testimony of Messrs. Fleming, Gzowski and Keefer removed all doubts as to the sufficiency of that stratum,

as a foundation upon which to base the caissons, and that no sufficient reason therefore existed for a departure from the original plan of construction.

The Chief Engineer in his letter of the 5th instant, addressed to the Secretary, says :—

" Notwithstanding the satisfactory nature of the information obtained by the pressure " tests referred to in my letter of February 22nd, I am of opinion, that in order to secure " that safety and durability so desirable in a structure of so much importance, it would " still be wise and prudent to construct the bridge over the north-west branch of the " Miramichi with six spans instead of five ; to increase the base of the piers from 24 feet " in width to 30 feet, to carry the two abutments to the rock, and found the solid work " of the piers on the gravel stratum, without disturbing the latter in any way.

" The additional price asked by the contractors for executing in a satisfactory manner " this amended plan, is so small compared with the magnitude of the work, the importance " of securing the permanent stability of the structure, and its completion with as little " delay as possible, that I recommend the proposal for favorable consideration.

" I have given the whole subject my best consideration, and from the latest and " best information received, respecting all the difficulties of the case, I am satisfied that " the course proposed and recommended is the best, having due regard to economy, safety " and durability."

The undersigned (although prepared so far as his individual opinion is concerned to re-affirm the recommendation contained in his report of 23rd February last) believing that in a matter of purely engineering character, such as the present, the sole responsibility of the plan upon which the work shall be carried out, should rest upon, and be borne by the chief Engineer ; and looking to the small additional cost (compared with the contract price) of carrying out a work of so great magnitude, where the foundations have turned out so entirely different to what was supposed and represented when the contract was let ; recommends that the alterations and modifications referred to in the letter of the Chief Engineer (and shewn upon the accompanying plan) be approved and adopted upon the terms and conditions therein set forth.

(Signed,) A. Walsh,
Commissioner.

Order in Council.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council on the 9th March, 1872.

The Committee of Council have had under consideration the memorandum dated 7th March, 1872, from the Chairman of the Commissioners for the construction of the I. C. Railway, submitting copies of the correspondence had between him and the other Commissioners and the Chief Engineer in reference to the proposed railway bridge across the north-west branch of the Miramichi river, and on the recommendation of the Hon. the Minister of Public Works, the Committee advise that the amended plan submitted with the Report of the Chief Engineer of the 5th March instant, be approved and adopted.

Certified.

(Signed,) Wm. H. Lee,
Clerk, P. C.

RETURN

To an Address of the HOUSE OF COMMONS, dated 29th April, 1872; For a Statement of all costs and charges connected with the Survey and Management of the Intercolonial Railway, since the date of the last Return made to this House on the subject. up to the present time; shewing in separate sums the amount of travelling and other expenses of the Commissioners including all the expenses of the Commissariat Office since the above date.

By command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, May 1st, 1872.

INTERCOLONIAL RAILWAY,
COMMISSIONERS' OFFICE,
OTTAWA, May 1st, 1872.

SIR,—I have the honor to enclose Return to an Address of the House of Commons, dated the 29th April, 1872, asking for statement of cost and charges connected with the survey and management of the Intercolonial Railway.

I have the honor to be,
Sir,
Your obedient servant,
RALPH JONES,
Secretary.

Hon. J. C. Aikins, Esq.,
Secretary of State,
&c., &c., &c.

RETURN to an Address and to an Order of the House of Commons, dated 29th April, 1872, for a "Statement of all cost and charges connected with the "Survey and Management of the Intercolonial Railway, since the date of "the last Return made to this House on the subject up to the present time, "shewing in separate sums the amount of travelling and other expenses of "the Commissioners, including all the expenses of the Commissariat Office "since the above date."

	$ cts.	$ cts.
Engineering and Survey,—from the 31st December, 1870, to the 30th March, 1872 :—		
Axemen and Laborers' wages	34,063 69	
Supplies and provisions to nine sections of the Line, from January to 31st May, 1871, and contingencies from 31st Dec., 1870, to 30th March, 1872.	34,440 43	
Salaries of Staff, do., do., do.	174,994 98	
		243,499 10
Management,—from 31st December, 1870 to the 30th March, 1872 :—		
Salaries	22,780 16	
Inspection of Line, travelling expenses of the Commissioners and the Engineers in July, August and December, 1871, and February, 1872	1,752 20	
Telegrams	675 10	
Postages	279 35	
Office Furniture	44 80	
Incidental expenses	27 26	
		25,558 87
		$269,057 97

COMMISSIONERS' OFFICE,
OTTAWA, 1st May, 1872.

RETURN

To an ADDRESS of the SENATE, dated 7th May, 1872, calling for "Copies of all "papers, letters and documents that have passed between the Government "of the Dominion, the Commissioners of the Intercolonial Railway, and "other persons interested in the following matters, viz.:—As to the rent paid "by the said Commissioners for the use of the House, now occupied at New "Castle, by A. L. Light, Esquire, and the Intercolonial Office, stating who "was the owner; 1st, of the said house at the time it was so rented; 2nd, of "the lands taken for the railway station; 3rd, of the old ship yard intended "for water terminus; 4th, of the old Commercial Bank buildings, now "occupied as the Custom House at Newasctle, specifying separately the "amount paid yearly for rent, the land damages, and the price paid or to "be paid for each of the said premises, and to whom, when, and how?"

By command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 17th May, 1872.

RETURN

To an ADDRESS, and to an Order of the SENATE, dated May 7th, 1872, for "Copies "of all papers, letters and documents that have passed between the Govern- "ment of the Dominion; the Commissioners on the Intercolonial Railway, "and other persons interested in the following matters, viz.:"—

(1.)—As to the rent paid by the said Commissioners for the use of the house now occupied at Newcastle, by A. L. Light, and the Intercolonial Office, stating who was the owner?

(*A.*)—The Honorable Peter Mitchell, owner; four hundred dollars per annum for offices and residence of A.L. Light, District Engineer.

(2.)—Of the lands taken for the railway station?

(*A.*)—Grounds for station not valued.

(3.)—Of the old ship yard intended for water terminus?

(*A.*)—There has been no point selected as yet at Newcastle as a water terminus.

(4.)—Of the old Commercial Bank building, now occupied as the Custom House at Newcastle, specifying separately the amount paid yearly for rent; the damages and the price paid, or to be paid for each of the said premises, and to whom, when, and how?

(*A.*)—There has been no correspondence, as this question does not come under the supervision of the Commissioners.

RALPH JONES,
Secretary.

INTERCOLONIAL RAILWAY, OFFICE OF THE COMMISSIONERS,
May 13th, 1872.

(No. 14.)

CUSTOMS' DEPARTMENT,
OTTAWA, 16th May, 1872.

SIR,—Adverting to the fourth paragraph of the enclosed Address from the Senate, bearing date the 7th instant, I have the honor to inform you that the old Commercial Bank building, now occupied as the Custom House at Newcastle, N.B., has been rented from Mr. W.H. Tuck, at a yearly rent of $200 (two hundred dollars), and not purchased.

I have the honor to be, Sir,
Your obedient servant,
R. M. S. BOUCHETTE.

E. Parent, Esquire,
Under Secretary of State of Canada,
Ottawa.

RETURN.

To an Address of the HOUSE OF COMMONS, dated 18th April, 1872, for Copies of all Despatches and Correspondence between the Dominion Government, and the Imperial Government, relative to the claims arising from the Fenian Invasion of Canada, and also Copies of all Orders in Council or other documents relating to such claims, and of the account of the Fenian Brotherhood drawn up by Lord Tenterden.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 26th April, 1872.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 2nd June, 1870.

The Committee of the Privy Council feel it their duty to represent to Your Excellency that it is desirable to take the earliest opportunity of acquainting Her Majesty's Secretary of State that it is their intention to urge the Imperial Government to demand reparation from the United States for the losses sustained, and expenses incurred, owing to the late invasion of Canada by citizens of that Republic.

The Committee of Council will be prepared to prove that the Government of the United States have for several weeks been cognizant of the preparations openly made by citizens of that country for the invasion of Canada.

It was not until the brigands were on the point of entering Canada that the Proclamation of the President of the United States was issued at Washington, and it was some days afterwards before United States troops appeared at the place of action. A proclamation unsupported by troops was obviously under the circumstances wholly ineffectual.

The Committee of Council submit, that if the President's Proclamation had been issued a few weeks sooner, and if troops had been sent to the frontier as might reasonably have been expected, Canada would have been saved a large expenditure of money. The Government of the United States had better means of obtaining information than the Canadian Government had, and yet the latter was able to call out the Militia, and to be prepared to repel the brigands at the several points on the frontier which were threatened.

It is scarcely necessary to remind Her Majesty's Government that when a raid was made from Canada on the United States Town of St. Albans in the year 1864, by Southern American refugees, although it had beeen projected with great secrecy, and without the knowledge of any Canadian authority, not only was pecuniary compensation promptly and cheerfully made by Canada, but militia were stationed on the frontier to prevent raids, and an Act was passed enabling the Government to expel from Canadian soil any alien violating the neutrality laws.

The Committee of Council are not at present prepared to make a full report specifying the amount of reparation which they will deem it their duty to claim, or the proof which they will offer of the knowledge of the United States' Government that an invasion of Canada was contemplated by American citizens; but they are of opinion that Her Majesty's Government ought to be apprized without delay that there is a general feeling throughout the Dominion, that the United States' Government has not adequately discharged its duty on this occasion, and that Great Britain is bound to protect the subjects of Her Majesty in the Dominion, by demanding adequate reparation for a most grievous wrong.

It may not be out of place on this occasion, to remind Her Majesty's Government that claims on the part of Canada for compensatlon for expenses and losses caused by the raids and threats of raids of citizens of the United States in the year 1866, and subsequently, were brought under the consideration of Her Majesty's Government on the 29th of December, 1868, by the Honorable Sir George E. Cartier, Baronet, and the Honorable William Mc Dougall, C.B.

The Committee of Council have to request that Your Excellency will transmit a copy of this Minute without delay to Her Majesty's Government.

Certified,

WM. H. LEE,
Clerk, Privy Council.

(Copy—Canada—No. 137.)

DOWNING STREET,
4th June, 1870.

SIR,—I have received the series of telegrams by which you have announced the collection of bodies of armed Fenians on the Southern Frontier of Canada, their irruptions into different parts of the Dominion, their discomfiture, disorganization, and final dispersion.

I regret that the Canadian Government should have been subjected to great expense, and the inhabitants of the frontier to protracted anxiety, from a body of conspirators whose capacity for mischief has proved to be so unequal to their boasts and ostentatious preparations.

I have at the same time sincere pleasure in congratulating your Government on the completeness of their precautions, and the hearty vigor with which, notwithstanding the many previous false alarms, their orders have been executed by the Canadian forces.

Her Majesty's Government have not failed to place before the Government of the United States the inconveniences which Canada was suffering, and likely to suffer from these hostile preparations on her frontier, and to urge them to counteract by all means in their power such movements.

Though they have as yet little official information on the subject, they hope to find that the aid of that Government was loyally given, and they anticipate that the avowed authors of these outrages, who are now said to be in the hands of the United States authorities, will receive such condign punishment as this wanton attack upon the peace of a neighbouring and friendly State deserves.

It is not often in the history of civilized nations that a country has suffered from an attack so gratuitous and unjustifiable as that which has been made upon the Dominion, and I can assure you that the Queen, together with the Parliament and people of this country, cordially sympathize with the annoyance which it has caused and admire the spirit with which it has been repelled.

I have, &c.,

(Signed,) GRANVILLE.

Copy of a Report of a Committee of the Honourable the Privy Council, submitted to His Excellency the Governor General, on the 1st July 1870.

The Committee of the Privy Council have had under their consideration a Despatch dated the 4th ultimo, addressed to Your Excelleney by the Right Honorable Earl Granville, Her Majesty's Principal Secretary of State for the Colonies, on the subject of the recent invasion of Canada by armed bands of Citizens of the United States.

The Committee of the Privy Council have already stated their views regarding this outrage, in their Minute of the 2nd ultimo, a copy of which they requested Your Excellency to transmit to the Secretary of State ; and the painful duty is now imposed on them of requesting Your Excellency to express to Earl Granville, their unfeigned regret at learning from his Despatch, that Her Majesty's Government, instead of demanding reparation from the Government of the United States, for the grievous outrages to which they have been subjected, have contented themselves with urging that Government to counteract such movements in future by all means in their power ; a demand which, no doubt, has already been made on more than one occasion, in 1866, and subsequently without any satisfactory result.

It appears from Earl Granville's despatch that Her Majesty's Government had then received "little official information on the subject" but His Lordship nevertheless expresses a hope that the aid of the United States Government was loyally given, and that the authors of the outrages will receive condign punishment. The Committee of the Privy Council entertain no expectation whatever, that any punishment, calculated to deter the miscreants concerned in these outrages from future attempts of a similar kind, will be inflicted on their leaders, the principal of whom, O'Neill, was a leader in the riot of 1866, when he escaped unpunished, And without desiring to convey any imputation whatever on the motives of the United States authorities, they confidently appeal to the fact that the President's Proclamation was not issued in proper time, and that the United States troops were not ordered to the Frontier until it was too late for them to be of any material service. It must be obvious that it would have been much easier to have despatched the United States regular troops to the frontier, than to have called out and armed the Canadian Militia, and yet the former were not at the scene of action while the latter were ready at every point on the frontier that was threatened.

The Committee of the Privy Council, in venturing to remonstrate against the communication described by Earl Granville as having been made to the United States Government on the occasion of the late outrage, would beg to refer to his lordship's own language in which they entirely concur. Earl Granville observes, "it is not often in the "history of civilized nains that a country has suffered from an attack so gratuitous and "unjustifiable as that which has been made on the Dominion." To this the Committee of Council feel it their duty to add, that they believe that there is no precedent in the history of civilized nations for a great power such as Great Britain submitting to such outrages on its loyal subjects without making a demand for adequate reparation.

The Committee of the Privy Council feel it their duty to express very strongly to Your Excellency for the information of Her Majesty's Government the deep sense entertained by the people of the Dominion of all shades of party, that they have not received from Her Majesty's Government that support and protection which, as loyal subjects of Her Majesty, they have a right to claim.

The Committee of the Privy Council gratefully acknowledge the expression of sympathy on the part of the Queen, Parliament and people of the United Kingdom on the occasion of the late invasion of the Dominion. The fact that a much loved member of the Royal Family was in the field with his regiment, tended to intensify the feeling of indignation which universally prevailed throughout the Dominion when the fact of the invasion became known.

The Committee of the Privy Council request that Your Excellency will be good enough to transmit a copy of this Minute to Her Majesty's Principal Secretary of State for the Colonies.

Certified, WM. H. LEE,
Clerk, Privy Council.

The Governor General to the Secretary of State for the Colonies.

(Copy—No. 146.)

NIAGARA, July 5th 1870.

MY LORD,—I have the honor to enclose the copy of a report of a Committee of the July 1st, 1870. Privy Council of the Dominion, in reference to Your Lordship's Despatch of the 4th ulto, No. 137, on the subject of the recent invasion of Canada by armed bands of citizens of the United States.

I transmit this document, not as a Minute of Council, approved in the usual course by the Governor General, but as a statement of opinion on the part of the Ministers who represent the views of the people, and are responsible for the Administration of the Public Affairs of the Dominion.

For obvious reasons I thought it incumbent upon me to withhold my approval while complying with the request that I should transmit a copy of the minute for Your Lordship's consideration, a course, of which, under all the circumstances, I trust you will be inclined to approve.

I have, &c.,
(Signed,) JOHN YOUNG.

The Right Honorable
The Earl Granville, K.G., &c., &c., &c.

The Governor General to the Secretary of State for the Colonies.

(Copy—No. 147.)

NIAGARA, July 5th, 1870.

MY LORD,—I have the honor to forward, herewith, a memorial which I have received from the Board of Trade of the City of Ottawa.

The memorial sets forth "a statement of facts connected with the external relations "of Canada to the Government and people of the United States," drawing special attention to the circumstances connected with the recent Fenian raid, and to the action of the American Government in reference thereto, as also to "the refusal to allow Canadian "vessels to pass through the Sault Ste. Marie Canal."

3. The memorialists pray that "this matter may be put before the Imperial Govern- "ment, in order that satisfaction may be demanded from the United States, a full "money compensation for the losses sustained, and security that measures will be at once "taken to prevent a repetition of those attempts in future."

I have, &c.,
(Signed,) JOHN YOUNG.

The Right Honorable
The Earl Granville, K.G., &c., &c., &c.

The Secretary of State for the Colonies, to the Governor General.

(Copy—Canada—No. 210.)

DOWNING STREET, August 4th, 1870.

SIR, —I have to acknowledge your Despatch, No. 147, of 5th July, enclosing a memorial which you had received from the Board of Trade of Ottawa, relating to the action of the American Government with reference to the recent Fenian raid.

On the subject I have to refer you to my Despatch, No. 138, of 27th ultimo, informing you of the result of my communication with Mr. Campbell, the Postmaster General of Canada.

I have, &c.,
(Signed,) KIMBERLEY.

Governor General
The Right Honorable
Sir John Young, Bart., G.C.B., G.C.M.G.,
&c., &c., &c.

The Secretary of State for the Colonies to the Governor General.

(Copy.—Canada.—No. 211.)

DOWNING STREET, August 4th, 1870.

SIR,—I have to acknowledge your Despatch No. 146, of 3rd of July, enclosing a copy of a report of a Committee of the Privy Council of the Dominion, on the subject of the recent Fenian attack upon Canada, which you inform me you transmit not as a minute of Council approved in the usual course, but as a statement of opinion on the part of the Ministers who represent the views of the people, and are responsible for the administration of the public affairs of the Dominion.

I regret to find that the Committee take so unfavorable a view of the conduct of Her Majesty's Government, but I cannot admit the justice of the accusation that the Canadian people have not received from Her Majesty's Government the support and protection, which, as loyal subjects of Mer Majesty, they have a right to claim.

You will have learnt from my Despatch, No. 198, of the 27th July, the course which Her Majesty's Government are prepared to adopt with respect to the grievances of Canada against the United States.

I have, &c.,
(Signed,) KIMBERLEY.

Governor General
The Right Honorable
Sir John Young, Bart., G.C.B., G.C.M.G.,
&c., &c., &c.

Extract of a Despatch from the Secretary of State for the Colonies to the Governor General.

(Copy—Canada—No. 135.)

DOWNING STREET,
27th July, 1870.

3. Mr. Campbell pressed strongly upon me that a representation should be made to the United States Government with reference to the late Fenian invasion into Canada, which had awakened such just feelings of indignation in the Dominion, and he urged the claims of Canada for reparation for the losses which she has sustained by that invasion.

"Her Majesty's Government have carefully considered what steps it would be advisable to take in this matter, and I have to acquaint you that they are of opinion that in the first instance your Ministers should draw up a full and authentic statement of the facts, and of the claims which they found upon them. This statement should be transmitted by you to Her Majesty's Government, in order that it may be laid by them before the Government of the United States, and I need scarcely say that whilst it should contain everything which is material to the case, it should be a document of such a character as may properly be communicated to the Government of a State with which Her Majesty is on terms of amity."

* * * * * *

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 20th August, 1870.

With reference to the Earl of Kimberley's Despatch hereunto annexed to Your Excellency, under date of the 27th July, 1870, the Committee of Council are of opinion that in order to enable them to prepare the full and authentic Statement of their claims on the Government of the United States for compensation for losses sustained by the raids made in Canada by Citizens of the United States in the years 1866 and 1870, it is desirable that they should be apprized of the several communications made to the Government of the United States by Her Majesty's Minister at Washington, on the subject of those several raids, and they therefore recommend that Your Excellency will be pleased to apply to Sir Edward Thornton for such information on the subject as it may be in his power to communicate, and to prevent the possibility of delay, the Committee of Council further recommend that Your Excellency will be also pleased to apply to Her Majesty's Government to instruct Sir Edward Thornton to furnish the required information.

The Committee of Council would further request that Your Excellency will cause to be prepared without delay a statement shewing the dates and particulars of communications made by Your Excellency or your Predecessor, to Her Majesty's Minister at Washington, prior to the raid of 1866, and subsequently on the subject of those raids, and also of all communications made to Your Excellency, either by Sir Edward Thornton or by any of the functionaries of the United States.

Certified.

WM. H. LEF,
Clerk, Privy Council.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 25th January, 1871.

(Canada—No. 198.)

The Committee of the Privy Council have had under their consideration that part of the Earl of Kimberley's despatch to Your Excellency, dated 27th July last, in which his Lordship refers to the representations made to him by the Hon. Mr. Campbell on behalf of the Canadian Government, with reference to the invasion of Canada by citizens of the United States in the month of May last. The Earl of Kimberley points out to Your Excellency that, in the opinion of Her Majesty's Government, the Canadian Ministers should, in the first instance, draw up a full and authentic statement of the facts and of the claims which they found upon them, in order that it may be laid before the Government of the United States. On receiving a copy of the Earl of Kimberley's despatch, it was the opinion of the Committee of the Privy Council that it would be desirable, before preparing such a statement as that indicated, that they should have an opportunity of

perusing the correspondence which had taken place between Her Majesty's Minister at Washington and the Government of the United States. They accordingly submitted, through Your Excellency, an application for copies of such correspondence, and their request having been acceded to, they have recently received from Your Excellency a copy of a despatch from Sir Edward Thornton, dated the 13th inst., enclosing a list of correspondence and copies of such letters as had not previously been transmitted to Your Exceliency or your predecessor. The Committee of the Privy Council have now the honor to submit a statement such as they think is called for by the Earl of Kimberley, and they venture to assert that if such an organization as that of the Fenian Brotherhood were tolerated in any European State, its avowed object being the invasion of a neighbouring State then at peace with that in which the organization existed, and if the result were the invasion of the neighboring and friendly State, there would be a demand for adequate reparation from the Government which had proved itself unable to restrain its subjects from such acts of aggression.

The Committee of the Privy Council feel that they would not do full justice to the claims of the Canadian people to Imperial sympathy, and support with reference to the wrongs inflicted upon them were they to fail to remind Her Majesty's Government that the Fenian movement against Canada was avowedly set on foot with the view of revenging the alleged wrongs sustained by Ireland from Great Britain. It has never been pretended that the Fenian brotherhood had any cause of complaint against Canada, but, on the contrary, it has been openly avowed that the objects of the attack on Canada was to aid the cause of the Irish malcontents. The question at issue appears to the Committee of the Privy Council to be, whether a civilized Government is to be held responsible for the acts of a large body of its subjects or citizens committed under the circumstances stated in the accompanying memorandum. The Committee of the Privy Council beg to refer on this occasion to the letter addressed to the Right Hon. Earl Granville, on the 28th December, 1868, by the Hon. Sir George E. Cartier, Bart., and the Hon. William McDougall on the subject of the Fenian raid of 1866, and to the reply thereto, dated 8th January, 1869, which Sir Frederic Rogers was directed by Earl Granville to make thereto.

Certified.

WM. H. LEE,
Clerk, Privy Council.

Memorandum.

In the month of November, 1863, a congress of persons styling themselves the Fenian Brotherhood, and consisting chiefly of natural born and naturalized citizens of the United States of America, was convened at Chicago, in the State of Illinois. Since that time there has been a regularly organized body, styling itself the Fenian Brotherhood. Its Head Quarters have been in the City of New York. It has had a President, Senate, and House of Delegates, and has occupied buildings on which the Fenian flag has been openly displayed. The Fenian Government has collected a revenue, and has issued bonds and notes; it has had a regularly organized army with prescribed uniforms, and officers regularly commissioned, and sworn. There has been no secrecy about this organization, and no attempt to conceal its object, one of the principal of which has been the conquest of Canada, against the people of which, it is not pretended it has had any cause of complaint. The drilling of the Fenian troops has been carried on in the most open manner, sometimes in the open air, and at other times in halls procured for the purpose.

In the month of August, 1865, the Canadian Government received confidential information that a Fenian expedition against Canada was being organized in the Western States, and from that time forward preparations for an invasion by a large force were active and increasing, and contributions were levied from American citizens to a very large amount. As an instance of the publicity of the proceedings, reference may be made

to a meeting held on 27th September, 1865, in Mozart Hall, in Cincinnatti, at which Judge Woodruff presided. On that occasion one of the speakers said, according to a report in the Cincinnatti *Daily Engineer* of 28th September, 1865, "250,000 men with "bristling bayonets will be seen battling for the cause of Irish freedom before the snow "of next December."

The same paper reported that after the speaking "it was announced that committees "would be appointed in the various wards who would visit our citizens during the coming "week for the purpose of raising funds for the purchase of rifles to be used by an Irish "army." The same proceedings which took place in Cincinnatti were adopted in many other cities and towns of the United States during the Autumn of 1865 and Winter of 1865–66.

As early as the 14th March, 1865, Her Majesty's Minister at Washington called the attention of the Government of the United States to the fact of the existence of an extensive conspiracy on the part of the so-called Fenian Brotherwood, and pointed out that officers in the service of the United States had taken part in the proceedings of that body. There can be no doubt whatever that the Government of the United States were fully cognizant of the preparations made for the invasion of Canada, which culminated in the Raid of June, 1866. The loss of life and property consequent on that outrage constitute one of the claims for reparation. Although the Government of the United States had been warned of the danger to be apprehended from the Fenians, it took no active measures until Canada had been actually invaded, when it is admitted it displayed considerable activity.

The leader of the invading force was convicted, and sentenced to imprisonment together with other ringleaders, and large quantities of arms were seized by the government of the United States. Unfortunately a very short time elapsed before the Fenian leaders were unconditionally released from prison, and the arms which had been seized restored to them. A Fenian Congress was held in September, 1866, little more than three months after the raid in Canada, and on that occasion it was publicly announced that the Fenians would not be content until Canada was invaded again.

Chicago Evening Journal, 2nd Sept., 1866.

From that time forth numerous meetings were held, as well as balls, pic-nics, and other demonstrations, all avowedly with the object of raising funds for the invasion of Canada. At some of these meetings there were imposing military displays of masses of men in Fenian uniforms, officered, armed, and equipped. Gentlemen of high position in the United States attended these meetings, as will appear in the following instance :—

In Chicago, in August, 1866, a pic-nic was held, and it was announced in placards and hand bills that General Logan, Governor Oglesby, and Speaker Colfax, would attend as speakers, and that the Fenian soldiers would parade in the grounds. In the course of a speech delivered on the occasion by Mr. Colfax, Speaker of the House of Representatives, he said, as reported: "I confess I was humiliated that our army was sent "there to act as police officers on the Canadian line. I was humiliated when our army "was sent to do the dirty work of spies and detectives against the Fenians."

On the 28th May, 1868, it was stated in the announcement of a "Grand Civil and Military Pic-nic, to take place in New York, that the 4th Regiment Irish Revolutionary Army will parade, and be reviewed by General O'Neill." Drilling was openly carried on in Buffalo, on the Terrace, and in Chicago, on Wabash Avenue.

In November, 1868, a Fenian Congress was held at Philadelphia, at which three Regiments of the Irish Republican Army, numbering fully 2,000, were paraded in line, commanded by Col. William Clingen. There were likewise present, General O'Neill, President of the Fenian Brotherhood, and the following, Staff-General Smolenski, Chief of Staff; Col. John W. Byron, Adjutant General; Col. J. J. Donnelly, Engineers; Major J. O. Leary, of Ordnance; and others.

In 1867, General Barry, of the United States' Army, commanding on the frontier, his head quarters being at Buffalo, had a number of his men tried and convicted of a breach of military discipline by leaving their quarters and joining a Fenian military

display. In a very short period after their sentence, and when their term of imprisonment had scarcely begun, a pardon was granted to the soldiers from headquarters, at Washington, and soon after General Barry was removed from his command. It has been positively asserted by Fenians themselves that they had received assurances from very high quarters that if a demand should be made on the State authorities for troops to aid the regular troops, they need not fear that this would be speedily given. In April, 1870, arrangements had been made for an invasion which were well known to the authorities of the United States, but no steps whatever was taken to prevent it. Fortunately, the Canadian Government ascertained that a raid was in contemplation, and called out a large force at considerable expense, which deterred the leaders for a time. So soon as the Canadian volunteers had been disbanded, the preparations for invasion were renewed, and the raid of May, 1870, took place at a time when it was supposed that Canada was completely off her guard. Great stress is laid on the fact of General O'Neill's arrest by the United States' Marshal, but it must be borne in mind that no attempt was made by the Marshal to prevent the invasion, and that it was after the complete defeat and dispersion of the Fenians, by the Canadian volunteers, that General O'Neill was arrested, as he had been in 1866, to be again tried, convicted, and again pardoned unconditionally.

Both in 1866 and in 1870 the action of the Government of the United States was delayed until it was of no practical value. The object of the Fenians on both occasions was to fortify themselves in an encampment on Canadian soil, after which they expected to receive ample supplies of munitions of war, men, and money from the United States. They were permitted to deposit arms at various depôts on the frontier, and to enter Canadian territory without hindrance, and it was only after their defeat that proceedings were taken against them. In March, 1868, Mr. Thornton, Her Majesty's Minister at Washington, by direction of Lord Stanley, called the attention of the Government of the United States to the Fenian organization for the invasion of Canada, assuring them that Her Majesty's Government did not allow themselves to doubt their willingness to defeat by every legal means in their power any attempt to organize in the United States, and to carry into execution any hostile enterprise against Her Majesty's Dominions in North America. In July, 1869, in consequence of a strong representation from the Governor General of Canada, Mr. Thornton visited Mr. Fish and urged upon him that the Government of the United States should cause the Fenians to be vigilantly watched. It may be admitted that the United States' Government must find considerable difficulty in restraining this formidable band of conspirators, styling themselves the Fenian Brotherhood, and possessing a great amount of political influence in all parts of the United States. It may also be possible that the laws of the United States are inadequate to enable the Government to suppress such organizations as the Fenian Brotherhood. It will hardly be contended, however, by the Government of the United States, that the inadequacy of the laws can be urged as a valid reason for refusing redress for injuries inflicted on a neighbouring and friendly State. In the discrepancies between Great Britain and the United States, with reference to the questions in controversy relating to violations of neutrality during the late civil war, it was always contended by the latter that if the law was not sufficiently stringent it should be made so, and that the violations of neutrality could not be defended on the ground of the insufficiency of the law.

Political reasons must of course have less weight. It may be very unfortunate for the United States' Government that so large a portion of the citizens of that country are either members of an illegal association, banded together to make war on a country with which its Government is on friendly alliance, or are sympathisers with those who are actually members of the conspiracy. This may and ought to be taken into consideration in estimating the extent of the responsibility of the United States, but it cannot be held as invalidating the just claims for compensation for the grievous injuries sustained by Canada from citizens of the United States, for whose conduct the Government of that country is clearly responsible. The issue is a simple one, and it is believed that if it were presented for adjudication to any civilized government in the world, the decision would be that Canada is entitled to compensation for the losses sustained by Her

Majesty's subjects, and the expenses incurred by the Government, owing to the invasions both in 1866 and 1870, by armed forces, organized upon and issuing from the territory of the United States.

The Governor General to the Secretary of State for the Colonies.

(Copy—No. 28.)

OTTAWA,
January 26th, 1871.

MY LORD,—I would beg to refer to the 3rd paragraph of your despatch, No. 198, of July 27th, 1870, in which Your Lordship stated that "Mr. Campbell had pressed strongly upon you that a representation should be made to the United States Government with reference to the late Fenian Invasion into Canada, which had awakened such just feelings of indignation in the Dominion, and that Mr. Campbell urged the claims of Canada for reparation for the losses which she had sustained by that invasion."

Your Lordship further observed that "Her Majesty's Government had carefully considered what steps it would be advisable to take in the matter, and they were of opinion, that in the first instance my Ministers should draw up a full and authentic Statement of the facts, and of the claims which they founded upon them," this Statement you directed me "to transmit to Her Majesty's Government, in order that it might be laid by them before the Government of the United States."

2. In accordance with these instructions, I duly brought the subject under the consideration of my responsible advisers, and I have the honor to forward herewith, the copy of a Report of the Privy Council of the Dominion, drawn up for the consideration of Her Majesty's Government, and appended to it a Memorandum, prepared as your lordship directed, for presentation to the Government of the United States.

I have, &c.,
(Signed,) LISGAR.

The Right Honorable
The Earl of Kimberley, &c.

The Earl of Kimberley to Lord Lisgar.

(Copy—Canada—No. 367.)

DOWNING STREET,
7th March, 1871.

MY LORD,—I have the honor to inform your lordship that copies of your Despatch, No. 28, of the 26th January last, and its enclosures respecting the claims of Canada arising out of the Fenian raids on the Dominion have been communicated by Lord Granville to Her Majesty's High Commissioners at Washington.

I have, &c.,
(Signed,) KIMBERLEY.

Governor General
The Right Honorable
Lord Lisgar, G.C.B., &c.

(Copy—Canada—No. 445.)

The Secretary of State for the Colonies to the Governor General.

DOWNING STREET,
20th June, 1871.

MY LORD,—In accordance with the strong wish expressed by the Dominion Government, that a representation should be made to the United States with reference to the losses inflicted on Canada by the Fenian raids, Her Majesty's Government instructed

the British High Commissioners to bring the claims arising out of those raids before the Joint High Commission.

Your Lordship will observe from the Protocols of Conferences, copies of which were transmitted to you in my Despatch, No. 444, of the 17th inst., that the American Commissioners declined to entertain the proposal made by the British Commissioners to include these claims in the treaty.

Har Majesty's Government were well aware of the serious difficulties in the way of settling this question, and they could not, therefore, feel surprised at this result. At the same time it was with much regret that they acquiesced in the omission of these claims from the general settlement of outstanding questions between Great Britain and the United States.

But it seemed to them evident that the British Commissioners were right in thinking that there was no reasonable probability that by further pressing the point an agreement would be come to upon it with the American Commissioners, and when the choice lay between the settlement of all the other differences between the two countries on terms which Her Majesty's Government believed to be honorable to both, and beneficial alike to Canada and the rest of the empire, and the frustration of all hope of bringing the negotiations to a satisfactory issue, they could not hesitate as to the course which it was their duty to take.

I have, &c.,

(Signed,) KIMBERLEY.

Governor General,
The Right Honorable,
Lord Lisgar, G.C.B., G.C.M.G.,
&c., &c., &c.

Copy of a Report of a Committee of the Honorable, the Privy Council, approved by His Excellency the Governor General in Council, on the 6th November, 1871.

The Committee of Council beg respectfully to draw your Excellency's attention to the fact that John O'Neill, who has been recently arrested by the United States authorities whilst leading a marauding expedition of so called Fenians, into an invasion of the Province of Manitoba, is the same man, who, in 1866, led a similar expedition into the Province of Ontario, near Fort Erie, and a second one in two divisions into the Province of Quebec in 1870.

These plundering and murdering expeditions were promptly repulsed, but not without the loss of valuable lives, and great injury to the country. Both in 1866 and 1870, after the Fenians had been driven back from the frontier by the Canadian Militia, arrests were made amongst them by the authorities of the United States, in which country their organization, arming and drilling, had been openly carried on. The present prisoner O'Neill and some of the others who are now in custody with him, were on each occasion amongst those who were arrested. In 1866 they were discharged without having been prosecuted to conviction, and in 1870, having been tried and sentenced, O'Neill and the others were pardoned and discharged from custody after a very short imprisonment. He and some of the others have now for the third time been arrested on this occasion promptly and before any lives were lost.

The Committee in recalling those circumstances to your Excellency's attention, submit that communication should be had with Her Majesty's Government on the subject with a view to such representation being made to the Government of the United States of the continued crimes of O'Neill, as well as of the other prisoners, as will insure their being prosecuted to conviction, and the infliction of a punishment commensurate with their repeated offences.

Certified.

WM. H. LEE,
Clerk Privy Council.

RETURN

To an Address of THE HOUSE OF COMMONS, dated 16th April, 1872; For Copies of all Correspondence with Lieut.-Governor A. G. Archibald, of Manitoba, and Mr. McMicken, Land Commissioner, regarding the Fenian Invasion of Manitoba, and the Intercourse of the said Lieut.-Governor with *Louis Riel*, the Leader of the Rebellion in the Territory, and one of the men charged with the murder of *Thomas Scott*.

By Command,

J. C. AIKINS,

Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,

OTTAWA, 26th April, 1872.

(No. 292.)

OTTAWA, April, 1872.

(No. 1,183. No. 956. ,, 963. ,, 964. ,, 968.

SIR,—I have the honor to transmit to you herewith, in compliance with your Order of Reference of the 17th instant, copies of all the correspondence of record in this Department, on the subject of the recent Fenian Invasion of the Province of Manitoba, as called for by the Address of the House of Commons of the 16th instant.

I have the honour to be, Sir,
Your most Obedient Servant,
E. A. MEREDITH,
Under Secretary of State for the Provinces.

E. Parent, Esq.,
Under Secretary of State.

(No. 276.)

GOVERNMENT HOUSE,
FORT GARRY, Oct. 3rd, 1871.

SIR,—I have the honour to acquaint you, for the information of His Excellency the Governor General, that after receiving from Mr. McMicken, on his arrival last evening, the reports connected with the Fenians, the substance of which I have transmitted by

last mail, I thought it desirable, and in this, I had the concurrence, not only of my political advisers, but of Mr. McMicken, and of other leading gentlemen with whom I consulted, to issue the Proclamation in English and French, of which you will find copies enclosed.

Arrangements were made for the immediate distribution of this Proclamation to every parish in the Province, and to-morrow copies will be in the hands of the Members of the Assembly and Council, and posted in public places in each Electoral District.

There has been within the last two days, a great desire on the part of the people to have some authoritative statement of the facts.

The assumed numbers of the invaders were, of course, greatly exagerated, and the stories become more and more absurd as they became transmitted from mouth to mouth.

It seemed necessary on the one hand to give some check to these, and on the other hand not to conceal the fact that there is sufficient cause of alarm to justify prompt and decided action.

Without any authority to commission officers, I have in the emergency taken the course pointed out in the Proclamation. In a case of this kind we could not be sacrificed to points of form.

Immediately the Proclamation was issued, a meeting of the people of Winnipeg was called by hand bills.—It took place at seven o'clock last evening, and was most harmonious and successful.

It was addressed by Archdeacon McLean, the Rev. Mr. Black, and the Rev. Mr. Young, who spoke of the necessity, in the presence of an invasion, such as was threatened, of sinking all small differences, and working as one man.

The sentiment met with great acceptance, and men who have hitherto not acted together united cordially in the movement. After the meeting was over, the names of somewhere about two hundred men were enrolled, most of them discharged men of the force sent out here, to be ready for service the moment they were called upon.

The employés of the Hudson's Bay Company, in and about Fort Garry, have enrolled themselves in a company, with Mr. Donald A. Smith at their head, to be drilled and added to the force, and to be ready for active service at a moment's notice.

We are also organizing mounted scouts to keep ourselves informed of the movements of the enemy, and every thing has been done that could be to initiate a defensive movement.

I have sent to the Minister of Justice from St. Cloud, a cypher telegram, which contains some particulars that I prefer forwarding by that channel.

I have, &e.,
(Signed), ADAMS G. ARCHIBALD.

The Honorable
The Secretary of State for the Provinces,
&c., &c., &c.

PROCLAMATION.

PROVINCE OF MANITOBA.

VICTORIA, by the Grace of God, of the United Kingdom of Great Britain and Ireland, Queen, Defender of the Faith, &c., &c., &c.

(Signed), ADAMS GEORGE ARCHIBALD.

To Our Loving Subjects, the Inhabitants of the Province of Manitoba.—GREETING:

Whereas, intelligence has just been received from trustworthy sources, that a band of lawless men, calling themselves Fenians, have assembled on the frontier line of the

United States, at or near Pembina, and that they intend to make a raid into this Province, from a country with which we are at peace, and to commit acts of depredation, pillage, and robbery, and other outrages upon the persons and property of Our Loving Subjects, the Inhabitants of this Province. While not unprepared to meet the emergency with our regular forces, We do hereby warn all Our said Loving Subjects to put themselves in readiness at once to assist in repelling this outrage upon their hearths and homes. We enjoin them immediately to assemble in their respective parishes, and enroll themselves for this purpose ; We call upon all Our said Loving Subjects, irrespective of race or religion, or of past local differences, to rally round the flag of Our Common Country. We enjoin them to select the best men of each locality to be officers, whom we shall duly authorize and commission, and we enjoin the officers so elected to put themselves in immediate communication with the Lieut.-Governor of Our said Province. We shall take care that persons possessed of military skill and experience shall be detailed to teach the necessary drill and discipline. All officers and men when called into service shall receive the pay and allowances given to the regular militia. The country need feel no alarm. We are quite able to repel these outlaws if they were numerous. The handful of them who threaten us can give no serious difficulty to brave men who have their homes and families to defend. Rally then, at once. We rely upon the prompt response of all Our People of every origin to this Our Call.

In Testimony whereof, we have caused these Our Letters to be made patent, and the Great Seal of Manitoba to be hereunto affixed : Witness, Our Trusty and Well-beloved, the Honorable Adams George Archibald, Lieut.-Governor of Our Province of Manitoba, Member of Our Privy Council for Canada, &c., &c. At Our Government House, at Fort Garry, this 3rd day of October, in the Year of Our Lord, One thousand eight hundred and seventy-one, and in the thirty-fifth year of Our Reign.

By Command,
(Signed), THOMAS HOWARD,
Provincial Secretary.

(No. 693.)

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 17th October, 1871.

SIR,—I have the honour to acknowledge the receipt of your despatch, No. 276, of the 3rd instant, referring to a previous report transmitted by you in reference to a threatened Fenian Raid into Manitoba, and covering a copy of a Proclamation, &c., issued by you calling upon the inhabitants to enroll themselves to repel the invaders.

No. 956.

Your despatch will receive immediate consideration.

I may add that no previous report from you on the subject of the Fenians has reached this Office.

I have, &c.,
(Signed), E. A. MEREDITH,
Under Secretary of State.

The Honorable
A. G. Archibald, Lieut.-Governor,
Fort Garry.

(No. 277)

GOVERNMENT HOUSE,
FORT GARRY, October 27th, 1871.

SIR,—I have the honour to acquaint you, for the information of His Excellency the Governor General, with the steps I have taken in respect of the Fenian Invasion.

I shall enter into full details in another despateh, and shall therefore confine this to a summary.

Up to Saturday the 30th ult., the rumours that reached us in reference to a Fenian Invasion were constantly changing. The detectives and scouts, whom we had sent to the frontier, could not do much more than echo the reports that were coming by every arrival from the East,—Some of these were extravagant in the extreme. The numbers of men on the march were variously put at 1,000, 1,500 2,000, and as high as 2,500. Industrious efforts were made from some quarter to create among the French half-breeds, the belief that a large body of men had been pushed forward towards the frontier.

On Monday, the scouts brought in more precise information; they reported that a body of men were certainly on the road to Pembina, ready to commence a raid.

On Monday evening, the 2nd inst., Mr. McMicken arrived by an express coach, bringing information which assured us the invasion was at hand. He was quite convinced however, that the number would not exceed 100 to 150; and that whatever danger there might be would be found to be within and not without the country.

On Tuesday, I issued the Proclamation, of which I have already forwarded to you copies; it was hardly published, till the people of Winnipeg, called together by handbills, adopted without a dissenting voice, enthusiastic resolutions, and determined to enrol in the defence of the country.

Next day the other English parishes held similar meetings, and before Friday the 6th instant, the number of men that had come forward, and enrolled themselves as willing to be called into service under the Proclamation had swollen to near 1,000. The utmost enthusiasm prevailed. Besides the persons so enrolled, a considerable number of half-breeds, English and French, volunteered as mounted scouts, and were stationed on the different routes across the prairie, by which an armed force might be expected to pass. These were effectually guarded, and provision made that no body of men could enter from any quarter without being observed.

Late on Thursday night, our scouts brought in word, that a body of raiders had passed the frontier, but the information was not precise as to numbers. They were supposed to be from 50 to 100 strong, with a large body in the rear. This report was confirmed by further accounts, received in the morning of Friday. On that day orders were issued to advance a body of troops to meet the enemy.

The services of two of the companies organized since Tuesday were accepted, and in three hours after the issue of the order to advance, a force of 200 volunteers including the 80 of the service companies in Fort Garry, with all their arms, ammunition, camp equipage, provisions, and medical stores, and one mountain howitzer, had crossed over and taken up a position on the south side of the Assiniboine, *en route* for the place where the Fenians were reported to be. The fort having been left garrisoned by a company of fifty of the Hudson Bay Company's officers and servants, who had organised into a volunteer company under the Proclamation. The afternoon was wet and cold, and the mud made the travelling difficult and disagreable, but the spirits of the men were excellent. The alacrity and cheerfulness they displayed was most creditable.

The troops had hardly commenced the march, when intelligence was received that the principal leaders of the movement had been captured by, and were in the custody of the United State force at Pembina.

It seems that a body of Fenians, numbering 40 or 50, and lead by Generals O'Neil and Donnelly, and Colonel Curley, with the assistance of O'Donoghue, had on the morning of Thursday the 5th instant, marched from a point twelve miles beyond Pembina, towards this Province.

They passed the frontier at about 7 o'clock a.m., and placing a guard over the Custom House, proceeded to the Hudson's Bay Company's Post, where they made prisoners of Mr. Watt, the officer in charge, and Mr. Douglas, custom's clerk under Mr. Bradley. They then proceeded to rifle the post. They had with them three carts laden with arms and ammunition. They had also a double wagon, which they loaded with provisions and supplies, and then commenced to ransack the store, taking clothing of all kinds.

Colonel Wheaton, with about thirty of his troops from the United States Fort, now came on the ground. The moment they appeared in sight the Fenians fled, and the soldiers gave chase, capturing O'Neill, Donnelly, and Curley, and eleven of the privates, with the arms and ammunition remaining in the carts. The prisoners, arms, and ammunition, were all taken to the United States Fort, Colonel Wheaton having first compelled the prisoners to unload the waggon and replace the provisions and goods in the Company's storehouse.

O'Donoghue escaped, and fled down the river bank, crossing over to the East side in a canoe.

Some French half-breeds following after him, succeeded in springing upon him. They seized a revolver he had stolen from Mr. Watt in the morning, and which he was trying to use; they tied him with ropes, and sent one of their number with word of the capture to Mr. Watt and Mr. Bradley.

These gentlemen fearing that an attempt at rescue might be made if he were sent down here, sent to Colonel Wheaton to ask him to take charge of the prisoner, and on obtaining his consent, they took him to the frontier, and delivered him over to the United States soldiers, to be conducted to the Fort and kept in custody.

Those of the raiders who were not captured, dispersed in every direction on the arrival of the soldiers.

The scouts who came in last evening report the road clear. There are no suspicious persons on the way.

The Pembina sympathizers pretend there is still a large body of men near the frontier, and that the movement is not settled yet. This I don't believe, but still, as the men have turned out and begun their march, there is no harm in allowing them to proceed a few miles in the direction of the frontier. So soon as I shall be assured that the danger is over, the forces will return.

There is no evil without its attendant good, and one benefit arising out of this will be the knowledge that when the time comes that Her Majesty requires the men of this country to rally to the support of the Government, the appeal will be promptly met by the great body of the people.

So far as I have been able to learn, there was in the ranks of the raiders one, and one only, French Metis, while the captnre of O'Donoghue was made by a number of French half-breeds, who have never swerved in their attachment to the Crown and to British institutions.

I have, &c.,

(Signed) A. J. Archibald.

The Honorable
The Secretary of State for the Provinces,
&c., &c., &c.

(No. 704.)

Department of the Secretary of State for the Provinces,
Ottawa, 24th October, 1871.

Sir,—I have the honour to acknowledge the receipt of your Despatch No. 277 (B),
No. 963. giving a summary report of matters connected with the recent Fenian invasion of Manitoba, announcing, *inter alia*, the loyal and enthusiastic

conduct of the inhabitants of the province in answer to your proclamation, the enrolment of about 1,000 volunteers, the advance of a force of 200 to meet the invaders, the seizure by the Fenians of the Hudson's Bay Post and Custom House, the capture of the principal leaders and others of the Fenians by the United States troops, also the capture of O'Donoghue by some French half-breeds, and their delivery of him for safe keeping to the United States troops, and finally the general dispersion of the raiders.

Your despatch will be brought under the early notice of His Excellency, the Governor General, on his return to the seat of government.

I have, &c.,
(Signed) JOSEPH HOWE,
Secretary of State.

The Honorable A. G. Archibald,
Lieutenant Governor, Fort Garry.

(No. 280.)

GOVERNMENT HOUSE, FORT GARRY,
October 9th, 1871.

SIR,—In my Despatch No. 277, of the 7th inst., I gave you some details of the Fenian invasion up to the date of that letter.

I omitted to state that so soon as I received, on the evening of the 6th inst., intelligence of the course pursued by Col. Wheaton, I addressed him a letter of thanks, of which I enclose you a copy.

I was anxious to secure the person of O'Donoghue, and with that view Major Irvine, at my request, addressed to that officer a letter, of which I enclose a copy, stating in substance that the prisoner had been taken on British soil by British subjects, who had handed him over for safe custody, and requesting his restoration to the British authorities.

This letter was delivered by Major Irvine's messenger to Colonel Wheaton, who declined to accede to the request, on the grounds set forth in his reply, of which I enclose a copy.

It was felt to be a great object to obtain possession of O'Donoghue's person. He knows so much about the country and the people that his power of doing mischief far exceeded that of any other of the party.

The plan adopted by O'Donoghue, as stated by himself to a Faench half-breed, whose co-operation he was soliciting, was to cross the frontier with a body of armed men, taking with him as he came along every man, either as prisoner or confederate, swelling his ranks till he came on to the body of the French population, in the parishes above the Fort. He was persuaded these would join him at once, and aid him in taking and plundering the Fort, when he would be joined by numbers of men from the United States, sufficient to enable him to hold the country.

It appears that conformably with this idea, the arms have been, ever since the middle of summer, deposited on the east side of Red River, within a few yards of the frontier, under a haystack. The night before the raid the arms were moved across to the west side of the river, and put into the cellar of of a house occupied by the widow of Elzéar Goulet (the man who was drowned last autumn near Fort Garry). This house stands on the side of the road leading down the river, within a few feet of thc track, and as the men marched towards the frontier, they armed themselves on passing the house.

The rest of the plan failed, as described in my last.

Throughout the whole affair the danger was the uncertainty that existed as to the action of the French Half-breeds. It was evidently O'Donoghue's expectation that they would join him. Those of the French Half-breeds who opposed the Provisional Government were certain of the defection of the sympathisers with Riel in the late movements,

and were constantly bringing reports to prove that these men would side with the enemy. Their holding back was very unfortunate so long as they failed to speak out, O'Donoghue might speculate upon their assistance.

The capture of O'Donoghue and the other leaders did not set the question at rest. The belief among the French Half-breeds was universal that the former would be soon set free by the United States civil authorities. Many of the English shared the same belief. With these leaders free to renew the raid, and the body of the Fenians who were in the vicinity of the frontier prepared for any thing, however desperate, an attack might be organized, with better prospects of success from St. Joe.

This place is 30 miles up the Pembina River. From it roads radiate in all directions towards our settlements. One leads direct to White Horse Plains, striking the Assiniboine about twenty-five miles up from the mouth, and following the crest of a ridge between these two points, on a line nearly parallel with the road from Pembina to Fort Garry.

Another road leads from St. Joe directly to the portage along the edge of the Pembina Mountain; and other less considerable roads diverge from these main roads, or strike the post road leading down the river in such a manner, that taking St. Joe as a point of departure, the country may be traversed in every direction.

From St. Joe, therefore, filled with a French Half-breed population, relatives, many of them, of the people of the White Horse Plains, and all of them, as United States citizens, sympathising with any thing that might lead to annexation, it was impossible to consider the danger as past, while the Fenians might gather at this point, distant far from the mounted patrol, and thirty miles remote from even a company of United States infantry.

It was with great pleasure, therefore, that I received on Saturday morning the intelligence that the French Half-breeds had rallied to the support of the Government, irrespective of the troubles of 1869 and 1870.

On Sunday about four o'clock, I was waited upon by the Speaker of the Assembly, the Provincial Treasurer, and other representatives of French Half-breed parishes, and informed that a body of these men had assembled at St. Boniface, on the opposite side of the river from Fort Garry, and that they would either come over to the Fort, or remain across the river, as I should judge best; but that they were anxious to see me, to have the opportunity of assuring me personally, that I might count on them in repelling the invasion.

I determined at once to go over, and on crossing the river found two hundred and upwards of French Half-breeds stationed on the bank, of whom about fifty were mounted men. They received me with a "feu de joie," and I was then assured by Mr. Girard that the persons present had assembled under the proclamation to declare their loyalty to the Crown, and their desire to be enrolled and to assist in defending the country. I thanked the men for their cordial response to my appeal, and assured them that should their services be needed they would be called out.

I spent some time in conversing with the crowd, who appeared to be much gratified at the opportunity I had afforded them to personally assure me of their loyalty and devotion to the crown.

Mr. Girard addressed the assemblage, stating, in very eloquent terms, the privileges they enjoyed in being under the British flag. His speech was loudly cheered, and for anything that could be observed, it was impossible to draw any other inference than that the people were most unanimous and enthusiastic, though among the crowd I had reason to believe there were some of the principal leaders of the movement of two years ago; but when this large body of men were coming forward under my proclamation, largely influenced in taking their course, as I had reason to believe, by the leaders in that movement to rally to the support of the Crown in a time of danger, it did not seem to me that that was the moment enquire into the antecedents of any person in the assembly.

I therefore accepted their expression of a desire to defend the country as genuine and sincere, and have no reason to doubt that they will flinch when the hour of danger arrives.

After the dispersion of the marauders on Thursday morning, and the withdrawal of the United States' forces beyond the line, Mr. Bradley, of the Customs', whom I have made a Justice of the Peace, was proceeding under the Proclamation to organize a body of men to defend the Post, when he received a message from Col. Wheaton to disband the men, otherwise he would come and take possession of the Post. Mr. Bradley had no alternative, and therefore proceeded no further.

It seems that Col. Wheaton considers the Post as within the American lines for military purposes, though not for purposes of commerce, as the Custom house is southward of the post, and no objection is made to our collection of customs there.

Last winter we occupied the Post with, as you will recollect, the consent of the United States' Government.

The moment, therefore, we could not re-occupy the Post without incurring the danger of international difficulties, it was useless to march the men over the 30 miles of dreary prairie, which lies beyond the Scratching River. I therefore sent a message to Major Irvine that unless he saw some military objection, that I should think it wise to return to the Fort, and keep up a body of scouts to inform us of any other raid that might be attempted.

He accordingly countermanded his march, and commenced his return. The troops will reach here to-morrow afternoon.

We shall have to station one company at the portage or the neighbourhood in the meantime, as a body for the population of these parishes to rally round, and shall be able, in case of necessity, to reinforce them with men and arms from other quarters.

At this moment the leaders of the invasion are undergoing examination before the United States Commissioner, having been handed over by the military to the civil authorities. It is feared they will be discharged. In O'Donoghue's case it is stated upon pretty good authority that if, on examination, it shall appear that he is a British subject, it will be held that he is not liable to be punished under the neutrality laws of the United States.

Under these circumstances I have directed the proper proceedings to be taken under the Ashburton Treaty, to have a warrant issued for his arrest on a charge of robbery, and shall send certified copies to the United States authorities, with a view to have him arrested and detained for extradition.

In the absence of Judge and Crown Officer, I have had to give general directions to the Magistrate, and have desired Mr. Bain, a member of the bar here, to attend the examination of witnesses, and see that the papers are regularly made out, and to make the proper application to the United States authorities at Pembina.

So soon as the result of this application shall appear, I shall acquaint you with it, so as if through it, the extradition of O'Donoghue may be demanded from the United States authorities.

I have, &c.,
(Signed,) ADAMS G. ARCHIBALD.

The Honorable
The Secretary of State for the Provinces,
&c., &c., &c.

GOVERNMENT HOUSE, FORT GARRY,
6th October, 1871.

MY DEAR COL. WHEATON,—Allow me to take the first opportunity in my power to thank you in Her Majesty's name for the prompitude and vigor with which you have used your position, to crush the wicked invasion recently organized within the Territories of the United States, against the peaceful and friendly inhabitants of this Province.

I can say no more of such a loyal discharge of international duties, than that it is worthy of the great nation whose Commission you have the honor to bear.

Accept, my dear Col. Wheaton, the assurance of my distinguished personal esteem, and believe me,

Yours sincerely,
(Signed,) A. G. ARCHIBALD.

Colonel Wheaton,
Commanding Fort Pembina.

HEAD QUARTERS,
6th October, 1871.

SIR,—I understand that William B. O'Donoghue was last evening, the 5th inst., arrested by British subjects in British territory, some six or seven miles this side of the lines, and was carried to the frontier by them, and handed over to you for safe custody.

I have sent a party with this, and will feel obliged if you will send him back to the frontier, to be returned to the custody of the British authorities, who will receive him there.

I have, &c.,
(Signed,) A. G. IRVINE,
Major commanding Dominion Forces.

Colonel Wheaton, U. S. A.,
Commanding at Fort Pembina, Dakota.

HEAD QUARTERS, FORT PEMBINA,
8th October, 1871.

SIR,—I have the honor to acknowledge the receipt of your communication of the 6th inst., requesting that I turn over to you one W. B. O'Donoghue, as a British subject, arrested in British territory, carried to the frontier, and handed over to me for safe custody.

In reply, I have the honor to state that W. B. O'Donoghue is not now in the custody of any military officer in the United States. A warrant having been issued for his arrest on the 6th inst. by a United States Commissioner, he was turned over to a United States Marshall, and is now in the custody of the civil power.

He is charged with the violation of the neutrality laws of the United States, and a preliminary examination in his case is now in progress before the United States Commissioner. I, therefore, have no power to comply with your request. It is presumed that application should be made through the proper channels for his surrender under the extradition laws.

I have, &c.,
(Signed) LOYD WHEATON,
Captain of Infantry commanding Post.

(No. 705.)

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 24th October, 1871.

SIR,—I have the honor to acknowledge the receipt of your Despatch, No. 280, of the 9th inst., with its enclosures (3) containing details in reference to the recent Fenian invasion of the Province of Manitoba, and reporting that the officer in command of the United States' troops at Pembina, had declined to restore

No. 964.

O'Donoghue to the British authorities, and that you had therefore directed the proper steps to be taken under the Ashburton Treaty with a view to his arrest in the United States on a charge of robbery, and his detention there for extradition to Canada, and announcing the gratifying exhibition of loyalty of the French Half-breeds, irrespective of the troubles of 1869 and 1870.

Your despatch will be brought under the notice of His Excellency the Governor General on his return to the seat of government.

I have, &c.,

(Signed,) JOSEPH HOWE,
Secretary of State.

The Honorable A. G. Archibald,
Lieutenant Governor, Fort Garry.

(No. 283.)

GOVERNMENT HOUSE, FORT GARRY,
13th October, 1871.

SIR,—Since writing my despatch of the 10th inst., enclosing your copy of cypher telegram for the Hon. Sir John A. Macdonald, on the subject of the Fenian raid, I have little to report.

I have issued an address to the people of the Province on the subject of the raid, the contents of which you will see by the copy enclosed. It contains a narrative of the raid up to date.

My object in issuing this address was partly to prevent misapprehension as to certain matters to which it refers; but it was more especially intended for abroad, and to show that no hopes can be entertained of success in any renewed invasion, based on the supposition of aid from any section of the inhabitants.

The response made to my Proclamation, considering the limited number of our people, is something quite unexampled, and entitles the inhabitants to a public testimony of my appreciation of their patriotism.

I learn that the Generals O'Neill and Donnelly, and Colonel Curley, left Pembina on Wednesday last by stage for St. Paul. O'Donoghue remains in the neighbourhood of the frontier.

There is in Pembina at this moment nothing beyond the excitement natural in the circumstances.

A Fenian residing near this place, who was with the raiders on the 5th instant, had stolen the horse of a Mr. Watt, the officer of the Hudson's Bay Company, stationed at the Post at Pembina. Mr. Watt went over yesterday to claim the horse, and succeeded in obtaining it, through the assistance of some parties there. On his way home, a friend who accompanied him, and who was carrying a fowling piece, was set upon by the horse thief and five or six confederates, and the gun was taken from him; the stock was broken in the struggle, and the barrel was subsequently discharged at him, fortunately without injury.

Every day furnishes incidents such as these, and it will be some time before the lawlessness of the frontier people will subside. We ought to station a company of soldiers at the Post. This was done last winter, and had the happiest effect. It would do more than any thing else I can conceive to stifle the rowdyism of the neighborhood. The Hudson's Bay Company are most anxious for it; Mr. Spencer, of the Customs, is urging me to protect his office, situate at the frontier, and near the Post.

Should it be decided to send a company there, it may perhaps be necessary to renew the communication of last winter, with Washington, on the subject.

Colonel Wheaton (Commandant at Pembina), I understand considers the Post within the United States lines, and has led our people there to believe that he would object to its being re-occupied by a garrison.

I have not in the slightest degree changed my mind as to the necessity of additi troops. They might be sent up now as private citizens on the United States railro but they ought to be here before the winter sets in, if you wish to consider the cou safe.

I have, &c.,
(Signed,) ADAM G. ARCHIBALD.

The Hon. The Secretary of State
for the Provinces, &c., &c.

THE MANITOBA GAZETTE.

Published by Authority.

WINNIPEG, FRIDAY, OCTOBER 13, 1871.

To the People of the Province of Manitoba:

IN THE NAME OF THE QUEEN, I thank you, one and all, for the promptitude and spirit with which you have rushed to the defence of the country, when called upon by Her Majesty's Proclamation.

From the moment when the rumors of a Fenian raid assumed a character to be relied upon, my great anxiety was, that our people, irrespectively of past differences, should present a united front to the bands of miscreants—the scum of the cities of the United States—who were collecting on our border for purposes of plunder, robbery and murder.

I had the best reason to know that the plans of the marauders were based on the belief that there were divisions in your ranks which would drive a part of the population into their arms.

O'Donoghue, one of the leaders of the gang, assured his companions that, on their arrival at the frontier, they would be joined by a party of our people disaffected to the crown, and ready to aid any invasion.

The events of the past few days have repelled this slander. At this moment, our whole population has assumed an attitude which affords no encouragement to these dastardly marauders.

On Tuesday, the 3rd inst., information reached me, that left no doubt of a raid being at hand.

On Wednesday, I issued a proclamation, calling upon you to assemble and enroll in your various parishes. Copies were distributed all over the Province, and by the evening of Thursday, the people of every English parish had met, had made up, and sent to me lists, shewing 1,000 men, ready at a moment's warning to shoulder their muskets and march to the front.

In the French parishes, meetings were also held, and by the same evening, I was assured, upon unquestionable authority, that my proclamation would meet with a loyal response. I suggested that it should be such as to admit of no misinterpretation, and received the assurance that it would assume a shape entirely satisfactory.

The reports from the front on Thursday left no doubt that the raid was to commence at once, and, next day, orders were given to advance a body of troops towards the frontier.

Major Irvine detailed, with that view, the bulk of the Service Companies in the Fort, two of those organized at Winnipeg, under Captains Mulvey and Kennedy, and a Company of Canadians and half-breed French under Captain de Plainval.

In two hours from the issue of the order, two hundred men, with their accoutrements, camp equipage and munitions of war, were across the Assiniboine *en route* for the frontier. The movement was executed in a manner that reflects the highest credit on Major Irvine, the officers of the different corps, and the men.

The march was continued till events occurred to render further advance unnecessary.

On Thursday, about noon, Colonel Wheaton, of the U. S. forces stationed at Pembina, with a loyal discharge of international duties, honorable alike to himself and to his country, attacked and dispersed the raiders as they were crossing the frontier, making prisoners of their self-styled Generals, and a number of the privates.

O'Donoghue escaped to this side of the line, but was arrested in the course of the evening by some French half-breeds. During the night, under a mistaken view of what was best to be done, he was taken to the frontier and placed in the same custody as the other prisoners, by parties who acted very naturally under the circumstances, but still, in a way be regretted.

Meanwhile, the French parishes were completing the arrangements which I had been assured were in contemplation. On the afternoon of the 8th inst., about four o'clock, Mr. Royal, the Speaker of the Assembly; Mr. Girard, the Provincial Treasurer, and several other of the Representatives of the French parishes, waited on me to say that a body of French half-breeds were assembled on the East bank of the Red River, and wished to be permitted to assure me personally of their loyalty, and to proffer their services as soldiers. I went over immediately, in company with Capt. McDonald, the commander at Fort Garry in Major Irvine's absence. I found assembled on the bank 200 able-bodied French Métis; of these fifty were mounted, and a considerable part of the whole body had fire-arms.

The received me with a *feu de joie.*

Mr. Girard then, in the name of the men assembled—in the name of the French Métis of all the Parishes—expressed, amid loud cheers and much enthusiasm, the loyalty and devotion of the Métis of every origin; and assured me they had rallied to the support of the Crown, and were prepared to do their duty as loyal subjects in repelling any raid that might now, or hereafter, be made on the country.

I thanked the people very cordially for the assurances given in their name, and told them I should take care to make this demonstration of their feelings known to His Excellency the Governor General.

If among these people there were—and I believe there were—some person whose exceptional position might have led O'Donoghue to look for their support, it only adds to the value of the demonstration, and removes the last hope of the miscreants who have invaded your soil, that they would receive sympathy or aid from any class of the population.

On Monday the troops returned to the Fort, and the volunteers from Winnipeg were allowed to go to their homes and resume their occupations.

I regret to have to inform you that on the same day, the United States civil authorities at Pembina, to whom Colonel Wheaton was obliged to hand over his prisoners, discharged these marauders, for reasons which I am unable to comprehend, and that one of them, O'Donoghue, still remains in the neighbourhood of Pembina, awaiting an opportunity of renewing the attack. Nevertheless, the raid for the moment is over. If renewed, it will not be immediately. If the Fenians were men actuated by ordinary reason, it would never be renewed. But they are not. They will trade, while they can, upon the simplicity of their dupes, and hope by excitement to replenish their exhausted exchequer. There is nothing in the wickedness or folly of any scheme to prevent their attempting it.

Rest assured I shall watth over your safety. Should danger come, you will be appealed to again, and you will respond like men of courage—of loyalty—of patriotism.

The QUEEN relies upon the fidelity of her people of this Province, of every origin.

ADAMS G. ARCHIBALD,
Lieutenant-Governor.

(No. 709.)

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 20th October, 1871.

SIR,—I have the honor to acknowledge the receipt of your Despatch, No. 283, of the 13th inst., enclosing a copy of an address issued by you to the people of the Province of Manitoba, on the subject of the Fenian raid, and, at the same time, recommending the stationing of a company of soldiers at the Hudson Bay Company's Post at Pembina, and repeating your opinion as to the necessity for additional troops in the Province.

No. 968.

I have, &c.,
(Signed,) JOSEPH HOWE,
Secretary of State.

The Honorable
A. G. Archibald,
Lieutenant Governor,
Fort Garry.

(No. 723.)

DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 3rd November, 1871.

SIR,—In compliance with the desire of His Excellency the Governor General, expressed in your note to Mr. Under-Secretary Meredith of the 31st ult., I have the honor to transmit to you, herewith, copies of depatches from the Lieutenant Governor of the Province of Manitoba, as noted in the margin, on the subject of the recent Fenian raid in that Province.

No. 968.
No. 276, 3rd October, 1871.
" 277, 7th " "
" 280, 9th " "
" 283, 13th " "
" 278, Private and Confidential, 8th Oct. 1871.

I have, &c.,
(Signed,) JOSEPH HOWE,
Secretary of State.

F. Turville, Esq.,
Governor's Secretary.

The Secretary of State for the Colonies to the Governor General.

Copy—Canada—No. 571.)

DOWNING STREET,
7th December, 1871.

MY LORD,—I have to acknowledge the receipt of your Lordship's Despatch, No. 183, of the 8th November, with enclosures relating to the recent attempt by the Fenians to invade the Province of Manitoba.

While Her Majesty's Government deeply regret the continuance of the attacks by these unprincipled marauders, they learn with the highest satisfaction that the appeal to defend the frontier was so promptly and loyally responded to.

I have, &c.,
(Signed,) KIMBERLEY.

Governor General
The Right Hon. LORD LISGAR, G.C.B.

Department of the Secretary of State for the Provinces.

OTTAWA, 2nd January, 1872.

SIR,—With reference to your Despatch No. 283, of the 13th October last, I have the honor by command of His Excellency the Governor General, to transmit to you, herewith, a copy of a Despatch from the Right Honorable the Secretary of State for the Colonies, expressing the satisfaction of Her Majesty's Government at the prompt and loyal manner in which the appeal to defend the frontier on the occasion of the recent attempted Fenian invasion of the Province of Manitoba was responded to by the Inhabitants of that Province.

Downing Street, 7th Dec., 1871.

May I request that you will have the goodness to cause publicity to be given to this despatch.

I have, &c.,
(Signed,) JOSEPH HOWE,
Secretary of State.

The Hon. A. G. Archibald,
Lieut.-Governor, Fort Garry,
Manitoba.

(No. 9.)

GOVERNMENT HOUSE,
FORT GARRY, 18th January, 1872

SIR,—I have the honor to acknowledge the receipt of your Despatch, M. No. 1, under date the 2nd inst., transmitting me a copy of a despatch from the Right Honorable the Secretary of State for the Colonies, expressing the satisfaction of Her Majesty's Government, at the prompt and loyal manner, in which the appeal to defend the frontier on the occasion of the recent attempted Fenian invasion of the Province of Manitoba, was responded to by the Inhabitants of that Province.

No. 2.
No. 968.
7th Dec., 1871.

I have, as desired, given instructions to have the correspondence published in the next Gazette.

I have, &c.,
(Signed,) ADAMS J. ARCHIBALD.

The Honorable
The Secretary of State
for the Provinces, &c., &c., &c.

FOURTH ANNUAL REPORT

OF THE

Directors of Penitentiaries

OF THE

DOMINION OF CANADA

FOR THE YEAR 1871.

PRINTED BY ORDER OF PARLIAMENT.

OTTAWA:
PRINTED BY I. B. TAYLOR, 29, 31 AND 33, RIDEAU STREET.

1872.

CONTENTS.

PAGE

GENERAL REPORT 1

REPORT OF THE KINGSTON PENITENTIARY 7

REPORT OF THE ROCKWOOD ASYLUM, KINGSTON 45

REPORT OF ST. JOHN, N. B., PENITENTIARY 66

REPORT OF HALIFAX PENITENTIARY 73

FOURTH ANNUAL REPORT

OF THE

DIRECTORS OF PENITENTIARIES,

OF THE

DOMINION OF CANADA.

FOR THE YEAR 1871.

To His Excellency the Right Honorable JOHN, BARON LISGAR, *G. C. B.,*
G. C. M. G., &c., &c., Governor General of Canada. &c., &c. &c.,

MAY IT PLEASE YOUR EXCELLENCY :

In accordance with the Act 31st *Victoria*, Cap. 75, the Directors have the honor to submit the Annual Report on the state of the Penitentiaries of the Dominion, subject to their supervision, for the year 1871.

KINGSTON PENITENTIARY.

One of the most noteworthy facts in connection with this Institution is the large falling off in the number of its inmates. Here, as in the other Penitentiaries of the Dominion, there has been a steady decrease in the number of committals for some years.

The Directors do not flatter themselves that this is entirely, or even mainly, due to the reformatory nature of the improvements introduced, beneficial, as, they may feel assured, they have proved; it would seem rather to be the natural consequence of the increased prosperity of the country, when work and highly remunerative wages are within the reach of all. The number of re-committals has also decreased, and in still greater proportion; on the whole they have had much reason to be pleased with the management of the Institution during the year.

As will be seen on reference to the Warden's Report, the expenditure has exceeded that of the preceding year, notwithstanding the lesser number of convicts. This may, in part, be accounted for from an advance in price of several article which enter largely into consumption, for instance, flour and meat; the increase rate of salaries paid to the officials as hereafter explained; the largely increased use of light found advisable, and the greater consumption of fire-wood.

The three former were absolute and exceptional causes of increase which could not be avoided; the necessity for the latter is a moot question.

The hygienic condition of the prison has been eminently satisfactory, but ten deaths and very few cases of sickness of any magnitude occurred throughout the year. This, the Surgeon, Dr. Dickson, attributes to the improvement in the matter of diet, the increase of out-door labor amongst the convicts, and the better condition of the water. Some changes have also been made to improve the ventilation, which, no doubt, have contributed towards these sanitary results.

The discipline has been in almost all respects satisfactorily maintained; under the attentive and humane management of the present Warden the duties of the convicts have been so performed that the punishments have been fewer than in former years; and it has only been found necessary to resort to such severe punishments as the shot-drill and cats on a couple occasions.

The various ameliorating privileges obtainable by good conduct have been found productive of the most beneficial results, and the Directors contemplate increasing them still farther.

The introduction of lamps into each cell, in order to afford the prisoners an opportunity of reading from night-fall to nine o'clock,—hours hitherto spent in darkness and idleness—has not only been a charity to these unfortunate men, but has had so soothing an influence that profound quiet and order have taken the place, during those hours, of riotous noises and other disturbances.

The privilege of obtaining, by good conduct, a remission of a portion of their sentence, is still highly appreciated by the convicts, and continues to induce great self-control and industry amongst them.

As will be seen by the table in connection with this matter, the greater number of the convicts have gained the highest award allowable (five days in each month), the lowest remission gained being 25 days, the highest amounting to 211 days, while, of the 195 who were discharged during the year upon expiration of sentence, but one had failed to obtain any remission.

This will appear the more noteworthy when it is stated that the convict, on any fault, not only fails to obtain the usual remission, but may lose a portion of that gained.

The system of gratuities, which has for some years prevailed in England and Ireland, has been to a certain extent introduced here, and found to work well. It consist in allowing to the convict, in consideration of his increased industry, a certain portion of his earnings, that on his discharge he may have some small fund to live on till he has found a situation, and may have no temptation to resort to criminal means of procuring subsistence.

This provision has been found necessary, as by far the greater proportion of the criminals, at least that portion that resorts to larceny, is drawn from the indigent classes. The possession of a small sum which has enabled the discharged convict to live honestly while seeking employment, and to get away from his former haunts with their corrupt associations, or perhaps start into some petty trade, has been found a very efficacious means of reclamation.

The allowing of gratuities is believed to have also a reformatory influence on the convicts, by replacing the dogged indifference of men working out a punishment, with the interest induced by hope of personal gain, however small, and so helping the formation of habits of industry, self-control, and the feeling of self-respect created by sense of independence.

This system is as yet only in an experimental state, but the Directors hope to see it fully matured before the close of the year.

The number released by pardon—many of them life prisoners—exceeds that of any former year in the history of the prison. The inquiries instituted into those cases were such as to satisfy Your Excellency that extenuating circumstances were more or less present in all of them; and, as a large number of the applicants for mercy had suffered lengthened imprisonments—extending even in many cases, from 10 to 20 years,—any

effect, apart from the mere object of punishment, may be justly considered to have been attained.

It would be hazarding much to assert a belief that all who partook of the executive clemency were deserving of it from amendment of life, but doubtless many have left the prison improved by the ordeal, who, though unable to condone the acts which caused their imprisonment, are not likely again to trouble society,

During the year several escapes took place, induced, perhaps, by the leniency of the new Warden, in not visiting the earlier mishaps with the punishment due to them; but he has come to discover that officers, as well as the convicts, require to be governed with strictness, and the institution is likely to be saved in future the recurrence of those discreditable accidents.

An increase in the pay of several of the officers was recommended by the Directors, and sanctioned by Your Excellency in Council. This was found necessary, in view of the largely increased rate of wages prevailing throughout the country, and partly in consequence of their having become entitled from length of service and recognized efficiency, to certain increases prescribed by regulation. But whilst considering the claims of those officers who—though in humble station, are for the most part a deserving class—discharging onerous, disagreeable, and often dangerous duties. The Directors have taken care that the appropriation of the year has not been exceeded.

There has been a large decrease in cash receipts from contract labor, owing to the great reduction in numbers which has taken place in the different shops; but the labor worked by the Prison Authorities has proved more profitable. The industry of the convicts was manifestly most vigorously exercised by the Trade Instructors, and prices improved.

In view of the approaching close of some of the contracts, the Directors deemed it advisable to warn the contractors of the probable discontinuance of the system of so hiring the convicts' labor, owing to the widely-spreading prejudice prevailing against it, but no decision has yet been arrived at. Should the system come to be abandoned there can be no difficulty in finding abundant and profitable employment for all hands.

Of this fact the Directors feel quite confident, that, under the management of the Prison Officials, the convicts would be better, in a moral and hygienic point of view, than engaged in the contractors' shops, they can be.

No progress was made during the year towards the construction of the Penal Prison, owing to the deficiency in hands; the labor yielded of necessity to the contractors, and that employed in works performed for the general public having absorbed all available help without undertaking any *new* works of construction, save the Warden's residence.

The Directors regret being unable to report favorably upon the progress of School matters. The duties were so irregularly performed that it was found necessary to dispense with the services of the Schoolmaster, and no successor has yet been appointed; but the subject of a new arrangement is under consideration by the two Chaplains.

The condition of the Female department has been found throughout the year quite satisfactory, great order and industry have been maintained, and the uniform submission to discipline is attested by the limited number and the lightness of the punishments found necessary, and by the extreme degree of quietude which at all times prevailed.

It is a subject for congratulation that in this department there have been no recommittals within the last two years.

PENITENTIARY OF ST. JOHN, N.B.

The inhabitants of this highly favored Province may justly congratulate themselves on the immunity from crime which they happily enjoy.

When it is remembered that with a population approaching 300,000 souls, the Pro-

vince contains but some 30 convicts, the pleasing fact is incontestably furnished that criminality has not taken root here. For the causes of this we need look no farther than to the moral tendencies of the people, and the facilities for finding remunerative employment, which prevail. Where these exist, crime is likely to be at a discount, and such is the happy case here.

A marked improvement has taken place for the past two years in the management of the manufacturing department, and, as a consequence, the labor of the prisoners has proved more profitable than in former years.

Means, different from those hitherto in practice, have been taken by the Directors to supply raw material, and a considerable saving to the public has been thereby effected. There is room for still further improvement.

The Hybrid principle upon which this prison had been managed before it came under the control of the Dominion Authorities, and under which it must continue for another year, affects quite injuriously its objects as a convict prison.

Under this system the petty delinquents committed for 30 or 60 days for some acts of vagrancy, and the criminals under a life sentence, convicted of the most heinous offences, are massed together. Such indiscriminate association of the criminal classes renders the maintenance of necessary discipline impossible, and deprives the prison of its deterrent, and consequently of its reformatory influence.

In fulfilling the functions of a common jail it must fail in accomplishing those of a convict prison. It is therefore to be devoutly wished that the separation may be as speedy as possible.

It is possible it may be found expedient at a future day to unite under one management the penal administration of New Brunswick and Nova Scotia within the one prison —located at Halifax.—thereby bringing the discipline and industries of both into uniformity, and economizing the expense of maintenance proportionally by the union.

A bold attempt at escape was made by one of the convicts, but defeated by the prompt action of the guard. The convict was severely wounded—losing also the remission of time he had gained.

The escape of a life prisoner was effected under circumstances which betrayed great carelessness upon the part of the Prison Authorities. He was arrested in the United States, but managed to excite the sympathy of those having him in charge, and his extradition was not effected.

If the prison is to be retained by the Dominion Government, the construction of a proper surrounding wall must be undertaken at once ; the present palisade fence being almost totally worthless. It can hardly be considered a protection against escapes but rather a standing temptation thereto.

At all the visits of the Directors the prison and other portions of the premises were found quite clean and orderly.

The Directors trust that Your Excellency will be pleased to recommend to Parliament to place at their disposal a small sum for the payment of gratuities to the deserving convicts of this and the Halifax Penitentiary, the trial at Kingston Penitentiary having been found so successful.

HALIFAX (N.S.) PENITENTIARY.

As has also been remarked of the other Penitentaries under the inspection of the Board, the falling off in the number of committals has been large here.

In view of the local characteristics which attach to the City of Halifax, especially the military and naval elements of population which it has always, in so large a degree, possessed, the Province of Nova Scotia may be considered as in the enjoyment of a singularly moral reputation.

As may be seen by referring to the earlier reports of the Directors, this prison was in a very primitive condition of management when it passed under control of the Dominion Government.

Since then the officers have acquired considerable knowledge of their duties, and discipline has been fairly maintained; considering the anomalous principle of management which obtains, the prison, like that of St. John, being made to receive alike the lowest and the highest classes of offenders. The new Warden seems disposed to do all in his power to promote the efficiency of the institution.

Within a short time the manufacture of Brooms, which had been found moderately profitable at the St. John Prison, has been initiated here, and with some prospects of success.

Heretofore, the majority of the prisoners were employed at Shoemaking, and being committed under short sentences, but few attained any degree of proficiency; their average earnings therefore did not exceed twenty-five cents a head daily. From the Broom manufactures much better results are anticipated.

In view of the possible expediency of uniting the two Provinces under one penal management, a survey of the prison and grounds at Halifax was ordered by the Dominion Government, and the acting Architect of Penitentiaries was accordingly commissioned to examine into, and report upon, the practicability of so improving that prison as to make it serve the requirements of both Provinces.

That report, with a plan of the alterations and additions proposed, has been submitted to Government with certain modifications, which, for economy and convenience the Directors deemed desirable. The prison, and offices connected therewith, were found on all occasions in a state of thorough cleanness and good order.

MANITOBA AND BRITISH COLUMBIA.

As the Directors have not as yet been commissioned by Your Excellency to make arrangements for the management of penal affairs in the recently united Province of Manitoba, no reference to the condition of Penitentiary administration in that province will be found in this report.

The system of penal management which obtained during the regime of the Hudson Bay Company will not now suit the altered relations of that Territory, but doubtless the department of Justice will, ere long, make provision for the introduction of the system which has been found so beneficial in the other Provinces of the Dominion.

When called upon the Directors shall earnestly address themselves to the duty of organizing the necessary arrangements according to the instructions it may please the Executive to give.

The same remarks may be taken to apply to the Province of British Columbia, concerning its Penitentiary affairs.

ROCKWOOD ASYLUM.

A slight reference to this institution will suffice, as the very elaborate report of Dr. Dickson, the Medical Superintendent, conveys the fullest information.

Under his energetic management, several improvements have been introduced which have much advanced its hygienic condition.

The average number of inmates has but slightly exceeded that of the previous year.

Is is to be regretted that there is not more land attached to this institution. The air and exercise attendant on farm work are now understood to be amongst the most efficient aids towards the restoration of the patients, and this species of employment, is also one of the most remunerative at which they could be occupied.

There is some land contiguous to the Asylum, which it would be to the advantage of the institution to secure, if obtainable at a moderate price.

As will be seen by Dr. Dickson's report, neither the heating nor the ventilation of this building is yet quite satisfactory.

The heating of large edifices, as seem by the failures attending many of the most important public buildings throughout this continent, is as yet an unsolved problem ; and, in this country, where climatic changes are so rapid and extreme, and the variations in temperature within the twenty-four hours so frequent, it seems almost impossible to arrive at its perfect solution. The Directors, however, hope with Dr. Dickson, that the plans which he proposes for the improvement of both the ventilation and heating, will meet with the success he anticipates for them, and so much to be desired for the efficiency of the institution.

The lighting of this fine building with coal oil lamps is, certainly, neither economical nor safe, but the Directors do not think it advisable to use as a gas house the building erected on its grounds for that purpose, and now converted to other use.

For the lighting of the Penitentiary, and the intended penal prison, the erection of gas works upon the Penitentiary premises is contemplated by the Directors ; and for the early carrying out of this design they hope to receive the sanction of the Government. In that event the desire of Dr. Dickson will be accomplished.

Owing to the great reduction in the number of working hands at the Penitentiary the Warden has been unable to afford the labor necessary for the construction of the boundary walls and the fences, which imposes undue responsibility upon the medical superintendent and his officers, while depriving the patients of the advantage of exercise through the grounds which they might enjoy if in a proper state of security.

The advanced state of the Warden's new dwelling will place men at disposal, at the opening of spring, for completing asylum walls.

The Asylum was found on all occasions in the highest state of regularity and cleanness, and the works of improvement commenced two years before were carried out during the year with unremitting spirit and great taste.

All which is respectfully submitted,

TERENCE J. O'NEILL,
JAMES W. KING,
F. X. PRIEUR.

KINGSTON PENITENTIARY.

List of Reports, Returns, &c., sent to T. J. O'Neill, Esq., Chairman, &c., 19th February, 1872 :—

1. Criminal statistical tables.
2. Punishments, male prison.
3. Do female do.
4. List of convicts recommitted.
5. Do do pardoned.
6. Do do sent to asylum.
7. Do do who died.
8. Movements of convicts.
9. Statement of remission of sentence.
10. Comparative table of criminal statistics.
11. Warden's Report.
12. Surgeon's Report.
13. Protestant Chaplain's Report (Statement of books in Library attached).
14. Roman Catholic do do do do do
15. Matron's do
16. Trade, Mr. Adam's do } In lieu of Architect's report.
17. Do do Painter's do }
18. Returns from Matron.
19. Do Prison shoe shop.
20. Do Farm.
21. Do Tailor.
22. Do Carpenter (summary)
23. Do Blacksmith do
24. Do Mason do
25. Real Estate. do
26. Stock do
27. Comparative statement of labour, 1870 and 1871.
28. Statement of Revenue.
29. Do Expenditure.
30. Do Debts due to the Penitentiary.
31. Do Claims against do
32. Do Labour on contracts.

JOHN CREIGHTON,
Warden.

KINGSTON PENITENTIARY,
19th February, 1872.

No. 1.

Recapitulation of Statistical Tables for 1871.

		Male.	Female.	Total.			Male.	Female.	Total.
Race.....	White.....	206	10	216	Civil condition	Single	151	6	157
	Coloured.....	8	0	8		Married	61	3	64
	Indian.....	2	0	2		Widowed.....	4	1	5
	Total..... ...	....	....	226		Total.....	....	..	226
Country....	England.....	20	2	22	Moral habits	Abstinent	72	0	72
	Ireland.....	30	2	32		Temperate.....	109	7	116
	Scotland.....	5	0	5		Intemperate	35	3	38
	Canada.....	128	6	134					
	United States.....	21	0	21		Total..... ..	....	..	226
	France (A).....	4	0	4					
	Prince E. Island (B)	2	0	2	Length of sentence..	2 years	88	8	96
	Cape Breton (C).....	1	0	1		2 1/12 years	4	0	4
	Sweden (D).....	1	0	1		2 2/12 "	1	0	1
	Germany (E).....	4	0	4		2 3/12 "	1	0	1
	Total.....	....	....	226		2 6/12 "	1	0	1
Age.....	15 to 20.....	50	2	52		2 8/12 "	1	0	1
	20 to 25.....	60	2	62		2 "	58	2	60
	25 to 30.....	32	1	33		3 2/12 "	1	0	1
	30 to 40.....	33	3	36		4 "	13	0	13
	40 to 50.....	21	0	21		4 3/12 "	1	0	1
	50 to 60.....	9	2	11		5 "	28	0	28
	60 and upwards.....	11	0	11		6 "	2	0	2
	Total.....	....	....	226		7 "	7	0	7
Religion...	Catholic.....	103	5	108		9 "	1	0	1
	Church of England.....	67	2	69		10 "	2	0	2
	Methodist	22	1	23		14 "	1	0	1
	Presbyterian.....	19	1	20		16 6/12 "	1	0	1
	Baptist.....	5	1	6					
	Total.....	....	....	226		Life	5	0	5
Education .	Neither read nor write.....	64	5	69					226
	Read only	16	2	18					
	Read and write.....	136	3	139					
	Total.....	....	....	226					

RECAPITULATION.—*Continued.*

Crimes.	Male.	Female.	Total.	Occupations.	Total.
Larceny	80	5	85	Females	70
Larceny and receiving	6	....	6	Printers	2
Receiving stolen Goods	3	1	4	Labourers	91
Stealing money from P. O. Letter	1	....	1	Blacksmiths	7
Burglary	11	....	11	Tailors	4
Burglary and Larceny	25	....	25	Saddlers	2
Aiding in a Burglary	2	....	2	Sailors	3
Cattle Stealing	6	....	6	Traders	1
Horse Stealing	22	....	22	Soldiers	1
Sheep Stealing	3	....	3	Shoemakers	21
Malicious injury to cattle	1	....	1	Painters	7
Robbery	6	1	7	Trunk makers	1
Robbery with violence	1	....	1	Farmers	10
Assault to rob	3	....	3	Clerks	11
Accessory to robbery	1	....	1	Confectioners	1
Attempt at Burglary	1	....	1	Brush Makers	1
Forgery	3	....	3	Carpenters	9
False pretences	4	....	4	Tinsmiths	3
Felony	4	...	4	Finishers	1
Rape	4	....	4	Stone Cutters	7
Assault to ravish	1	....	1	Moulders	1
Arson	4	1	5	Butchers	3
Embezzlement	3	....	3	Cooks	2
Possessing Counterfeit Coin	2	....	2	Cabinet Makers	7
Aggravated assault	4	....	4	Brass Moulders	1
Wounding to do grievous bodily harm	3	....	3	Machinists	5
Shooting with intent to murder	2	....	2	Engineers	1
Attempt at murder	3	1	4	Ecclesiastics	1
Manslaughter	3	1	4	Merchants	1
Murder	3	....	3	Bakers	1
Assault with intent to disfigure	1	....	1	Farriers	1
				Students	1
				Cigar Makers	1
				Coopers	1
				Tanners	1
				Carvers	2
				Chair Makers	1
				Furriers	1
				Clock Makers	1
Total	....	....	226		226

No. 2.—Summary of Punishments awarded to Convicts in the Kingston Penitentia y, during the year 1871.

Months.	No. of meals of bread and water administered.								No. without beds.	No. in dark cells.	No. in solitary cells.	No. flogged.	No. of lashes.	No. chained.	No. admonished.	No. deprived of stripes.	No. debarred school.	No. confined in their own cells. — Days.				No. who lost remission. — Days.					Deprived of lights.	6 days bread and water.	Shot drill.		Remarks.
	7	6	5	4	3	2	1	Total.										1	2	3	7	3	5	7	14	30			Men.	Days.	
January	...	...	...	1	2	3	9	15	....	14	1	....	....	....	70	....	2	...	...	...	...	...	...	...	...	...	....	....	2	1	
February	...	...	...	...	1	2	14	17	....	17	....	....	....	....	46	1	....	...	1	...	...	...	...	...	...	...	....	....	....	....	
March	...	...	...	...	2	1	28	31	..	20	....	....	....	....	52	....	....	...	...	...	1	...	...	...	...	...	....	....	....	....	
April	...	...	...	1	2	4	29	36	....	31	....	....	....	....	80	....	7	...	...	...	1	...	...	...	...	...	....	....	....	....	
May	...	1	...	...	3	4	25	33	....	30	....	....	....	...	82	5	3	...	...	...	...	...	...	...	...	...	..	....	....	....	
June	...	...	...	...	6	...	27	33	....	26	....	....	....	....	68	....	3	...	...	...	...	...	...	...	...	...	....	..	....	....	
July	...	...	...	...	...	...	41	41	....	34	4	....	....	....	61	3	....	1	...	1	...	...	...	...	...	...	....	....	....	....	
August	...	...	...	...	...	...	70	70	....	56	17	1	11	1	25	5	6	...	...	...	...	...	...	...	...	1	....	....	....	....	
September	...	...	...	...	...	...	7	7	....	23	4	....	....	1	49	3	....	...	...	...	...	...	...	...	...	...	....	....	....	....	
October	1	...	...	...	1	...	6	8	....	20	5	2	24	....	27	7	1	...	...	...	...	...	...	...	...	2	....	2	....	....	
November	...	...	...	...	1	3	25	29	5	22	4	....	....	....	44	1	....	...	...	...	...	1	...	1	...	...	....	2	....	....	
December	...	...	...	...	1	3	26	30	11	39	5	....	....	....	24	2	....	...	...	...	...	6	2	...	1	3	....	....	....	....	
Total	1	1	...	2	19	20	307	350	16	332	40	3	35	2	628	27	22	1	1	1	2	7	2	1	1	6	4	2	2	1	

When chained.	Convicts chained.	When taken off.
August 28th	Martin Cahill	2nd September.
September 7th	Martin Cahill	4th October.

No. 3.—Return of Punishments in the Female Department of the Kingston Penitentiary, for the year ending 31st December, 1871.

Months.	Reports notacted upon.	Admonished.	One night hard bed.	Meals of bread and water and night's hard bed.		Days in solitary cell.			Total reports.	Total reported.	Total number of females in prison.	Remarks.
				1	2	1	2	3				
January...	1	3	.....	.....	... .	.....	.....	.....	4	4	48	
February...	2	.....	.....	.....	.....	.....	.....	.....	2	2	46	
March	2	.....	.....	.....	.....	1	.....	.....	3	3	46	
April	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	45	
May	1	.....	1	1	.....	2	1	.....	6	6	45	
June	5	.....	1	.....	.....	.....	.....	.....	6	6	46	
July	.....	.....	.....	.....	.....	.....	.....	1	1	1	44	
August.....	2	.....	2	.....	1	.....	2	1	8	8	42	
September..	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	41	
October	1	5	.....	.....	.....	1	1	.....	8	8	42	
November..	.....	1	1	.....	.....	.....	.....	.....	2	2	38	
December ..	1	.....	.....	.. ..	.....	3	.....	.....	4	4	38	
Totals....	15	9	5	1	1	7	4	2	44	44	521	

Kingston Penitentiary, 3rd January, 1872, M. Leahy, *Matron.*

No. 4.—Nominal List of Convicts Re-committed, and Number of Re-commitments.

	Names.	1st Re-commitment.	2nd Re-commitment.	3rd Re-commitment.	4th Re-commitment.	5th Re-commitment.	6th Re-commitment.	Remarks.
1	John Brown.....	.....	1					
2	Thomas Johnson.....	.....	1					
3	Philip Donnelly	1						
4	James Holland	.....	.....	.....	.....	.....	1	
5	James C. Wall.....	1						
6	Joseph Ford.....	1						
7	Pierre Belleau	1						
8	John Buckley	1						
9	Chaucey Culbert.....	1						
10	Cornelius Leary	.....	1					
11	Edward O'Brien	.....	.....	1				
12	Joseph Durand	1						
13	Napoleon Geroux	1						
14	Christopher Bertrand....	1						
15	Albert Card	.....	1					
16	Henry Chas. Hill	1						
17	Moses Tucker.....	1						
18	James Kelly.....	1						
19	William Larkin	1						
20	Paul Thomas	1						
21	George Jones	.....	.....	.....	1			
22	James Kerr	1						
23	James Wooderaw	1						
24	William B. Chisholm....	.....	.....	1				
25	Charles Laudreville	1						
		17	4	2	1	... ..	1	

Kingston Penitentiary, 31st December ,1871.

No. 5.—NOMINAL LIST of Convicts "Pardoned" during the year, with Crime, and place where Convicted.

	Names.	Crime.	Place where Convicted.
1	George Smith	Horse Stealing	Norfolk.
2	John Nichols	Murder	Brant.
3	William Curry	Highway Robbery	,,
4	Patrick McGuire	,, ,,	,,
5	James Carroll	Murder	Montreal.
6	John Hope	,,	Northumberland and D.
7	Edmond Duconda	Shooting with intent	Montreal.
8	Thomas Madden	Felony	Bedford.
9	William Douglas	Murder	Wentworth.
10	Louis Larue	Felony	Kamouraska.
11	Leon Messier	Horse Stealing	Bedford.
12	Charles Brossard	Obtaining P. O. letter under false pretences	Frontenac.
13	William H. Lee	Horse Stealing	Montreal.
14	Jean B. Longpré	Felony	Lambton.
15	Charles Toussaint	Rape	St. Francis.
16	Charles Clouthier	Larceny	Montreal.
17	Thomas Swanton	Manslaughter	Kent.
18	John Davis	Larceny	Brant.
19	Robert Renwick	"	Huron.
20	G. T. Rathburn	Horse Stealing and Larceny	Leeds and Grenville.
21	Robert B. Lynch	Lawless Aggressions	York.
22	Alexander Sherwood	Burglary and Larceny	Lambton.
23	Victor Gosselin	Assault and Robbery	Quebec.
24	John Hendrick	Wounding with intent	Lennox and Addington.
25	Joseph Winthorn	Forgery	Ontario.
26	Patrick O'Neill	Felony	York.
27	Andrew Kirk	Larceny	Northumberland and D.
28	George Lovely	Burglary and Robbery	Lambton.
29	William Hayden	Lawless Aggressions	York.
30	William McLean	Murder	Northumberland and D.
31	Henry Martin	Attempt at Arson and Prison Breach	Bedford.
32	Anthony Gordon	Unnatural Crime	Northumberland and D.
33	Robert G. Camp	Rape	Wentworth.
34	Owen Kennedy	Felony	York.
35	Philip Stephens	Larceny	Brant.
36	Sarah Bliss	Conspiracy	Elgin.
37	John Gallagher	Felony	York.
38	George Cook	"	Frontenac.
39	Thomas O'Donnell	Larceny	Oxford.
40	George Poulette	Receiving Stolen Money	Montreal.
41	Felix Guilbeault	Larceny	,,
42	Thomas School	Lawless Aggressions	York.
43	Isham Shanklin	Larceny and Receiving	Elgin.
44	James Anderson	Receiving Stolen Goods	Northumberland and D.
45	Thomas Smith	Felony	Bedford.
46	Henry J. Smith	Robbery	Stormont, D. and G.
47	David Williamson	Larceny	Lennox and Addington.
48	Samuel S. Allen	Rape	Northumberland and D.
49	Pierre Legaré	Larceny	Montreal.
50	James Trick	"	Northumberland and D.
51	John O'Toole	Manslaughter	Frontenac.
52	Guilliaume Carreau	Robbery	Quebec.
53	James McGarry	Murder	Wellington.
54	Daniel Quinn	Felony	York.
55	George Smith	Sodomy	Frontenac.
56	George Gustave	Felony	York.
57	James Armstrong	Larceny and Stabbing	Carleton.
58	Jacob Nill	Murder	York.
59	Robert Revels	"	,,
60	Patrick McGrath	Felony	,,
61	Duncan McRae	Procuring Abortion	Northumberland and D.
62	John McConnell	Manslaughter	Halton.
63	Patrick Norton	Felony	York.
64	John W. Blanchard	Cattle Stealing	Bedford.
65	Edward Wicklow	Murder	Wellington.
66	Joseph C. Tisdale	Conspiracy	Elgin.
67	Francis Gilchen	Inflicting Grievous Bodily Harm	Quebec.

No. 6.—NOMINAL LIST of Convicts who have become Insane, during the year 1871, with their present state.

	Names.	Present State.
1	Louis Filion	Improved
2	James Wood	"
3	Maurice Blake	Returned to Penitentiary
4	Martin Cahill	" "
5	Denis Price	No change
6	Louis Langlois	Hopelessly demented
7	William Reed	No improvement
8	Thomas Oldfield	Improved
9	James Black	No improvement
10	Hannah O'Connor	Very much improved
11	Sandford Wood	No better

KINGSTON PENITENTIARY, 31st December, 1871.

No. 7.—NOMINAL LIST of Convicts who have Died; with Crime, and place of Conviction.

	Names.	Crime.	Place of Conviction.
1	Dudley Gilman	Setting fire to a bridge	Ottawa
2	Amos Kelly	Arson	York
3	Edwin Peters	Cattle stealing	Northumberland and Durham
4	John I. Chucker	Manslaughter	Grey
5	Charles Medley	Murder	Essex
6	George Hogg	Sodomy	Frontenac
7	Peter Hughes	Felony	Stormont, Dundas and Glengarry
8	Robert Caswell	Arson	Grey
9	Charles Rice	Larceny	Montreal
10	Alanzon Swazie	Forgery	Norfolk, (Suicide)
11	Charles Godbout	Larceny	Three Rivers

KINGSTON PENITENTIARY, 31st December, 1871.

No. 8.—MOVEMENTS of Convicts in the Kingston Penitentiary, from midnight of 31st December, 1870, until midnight of 31st December, 1871.

Description.	Males.	Females.	Total.	Males.	Females.	Total.
Remaining at midnight, 31st December, 1870	.....	.....	.....	638	48	686
Admitted since :—						
From County Jails	216	10	226			
,, Rockwood Asylum	5	.....	5			
				221	10	231
				859	58	917
Discharged since :—						
By expiration of sentence	177	18	195			
Pardon	66	1	67			
Sent to Rockwood Asylum	10	1	11			
Suicide	1	.....	1			
Death	10	.....	10			
Escape	5	.....	5			
Removed to Reformatory	.....	.....	.....			
,, by order of court	.....	.....	.....			
				269	20	289
Remaining at midnight, 31st December, 1871	.....	.....	.....	590	38	628

KINGSTON PENITENTIARY, 31st December, 1871.

RETURN of the Number of Convicts employed in the several Departments of the Kingston Penitentiary, on the 30th day of December, 1871, and the number of days' work performed therein during the year.

Department.	Men.	Days.	Remarks.
Mason :—			
Stonecutters	51	11,484	
Masons	17	5,714	
Quarries	49	13,222	
Labourers	15	5,133	
Railway	1	306	
Carpenter	38	11,846	
Tailor	32	8,421½	
Blacksmith	20	5,261	
Prison shoe shop	7	2,175½	
Steward's and wings	30	9,067	
Bakery	6	2,005½	
Woodyard	19	4,098	
Wash-house	8	2,321	
Drying room	29	5,766½	
Stables and bucket ground	12	3,005	
North Lodge	1	312	
Farm	9	2,845	
Hospital :—			
Patients	22	9,903	
Orderlies	6	1,976	
Cabinet shop	48	13,776½	
Foundry	77	21,120½	
Contract shoe shop	78	33,391¾	
Female	38	12,714	
	613	185,864¾	

N.B.—The fifteen convicts unaccounted for by the departments are composed of old men, unable to work, convalescents, and prisoners variously employed, but of whose time no record is kept; as, for instance, mess-man, printer, front-yard-man, &c., and also, of new arrivals who have not yet been assigned to any employment.

No. 9.—Statement of "Remission of Sentence," earned by convicts discharged from the Kingston Penitentiary, in 1871:—

1	Convict averaged		25	days.
1	,,	,,	32	,,
2	,,	,,	41½	,,
4	,,	,,	56	,,
18	,,	,,	65½	,,
45	,,	,,	75	,,
11	,,	,,	82	,,
6	,,	,,	95⅚	,,
6	,,	,,	105⅓	,,
16	,,	,,	114 9/16	,,
29	,,	,,	129½	,,
5	,,	,,	135⅕	,,
5	,,	,,	145⅗	,,
6	,,	,,	151⅓	,,
7	,,	,,	166⅐	,,
7	,,	,,	176 4/7	,,
7	,,	,,	184 4/7	,,
5	,,	,,	193	,,
12	,,	,,	203	,,
1	,,	,,	211	,,

Smallest number of days gained	25
Highest number	211
Number of convicts discharged (not including pardons)	195
Number who earned remission	194

No. 10.—Comparative Table of Criminal Statistics, for the year 1870–71.

Kingston Penitentiary.

Description.	1870.	1871.	Remarks.
Number received from County Jails	196	226	
" " Asylum	.....	5	
Discharged by expiration of sentence	170	195	
Pardoned	28	67	
Sent to Lunatic Asylum	11	11	
Suicides	1	1	
Deaths	12	10	
Escaped	.....	5	
Removed by Order of Court	1	.....	
Punished—Bread and water	540	352	
Without beds	10	16	
Dark cells	226	332	
Solitary cells	11	40	
Catted	9	3	
Lashes inflicted	249	35	
Chained	6	2	
Admonished	183	628	
Deprived of stripes	46	27	
Debarred school	.....	22	
Confined to their cells	.....	5	
Deprived of part of remission	.....	17	
" lights	.....	4	
Shot drill	86	2	
Number of days shot drill	198	2	
Without supper	18	.....	
Deprived of white bread	1	.....	
" meat	1	.....	
Number in prison on 31st December	686	628	
Number of days' work performed	*114,817¾	185,864¾	*Contracts not included.
Number of convicts discharged who earned remission	153	194	
" " " no remission	17	1	
Smallest number of days gained	2	25	
Greatest " "	162	211	
Recommitments	28	25	
	$ cts.	$ cts.	
Revenue	48,324 31	40,975 15	
Expenditure	104,905 43	110,362 49	

No. 11.—REPORT OF THE WARDEN OF THE KINGSTON PENITENTIARY, FOR THE YEAR ENDING 31ST DECEMBER, 1871.

KINGSTON PENITENTIARY,
6th February, 1872.

T. J. O'Neill, Esq.,
Chairman,
Directors of Penitentiaries, &c.

SIR,—I have the honor to submit this my First Report, on affairs pertaining to the the Kingston Penitentiary, for the year ending 31st December, 1871.

His Excellency, Lord Lisgar, Governor General, appointed me Warden, on the 31st December, 1870, and I assumed the duties of the office on Tuesday, 3rd January, 1871.

On entering the dining hall of the Institution at noon on that day, I introduced myself to the convicts, and briefly assured them that I would endeavour, by God's help, to exercise a kindly moral influence amongst them, and use my best exertions to promote their comfort and improvement. That, in order to obtain any degree of success in that direction, they must all aid me, and that the best way to render me assistance was to obey the rules of the prison, and those who were placed over them; that they should do this from principle, not from fear of punishment. That I hoped the keeper and guards would treat them fairly, and that the most insignificant convict in the prison would obtain justice at my hands, and always find me ready to redress any real grievance.

As I had not the experience of my predecessor in prison matters to commence with, I set about to acquire a knowledge of my duties, which I soon found to be sufficiently arduous to test the physical and mental powers of any man. I looked upon the convicts as sent to the Penitentiary not only for punishment but for reform. Many of these unfortunates never received any moral or religious training, and have been raised up in poverty and vice, wholly neglected by society until they committed some offence against it. And about fifteen per cent. of them are only half-witted, and scarcely responsible for their actions.

To secure that influence over the convicts which I desired, I found that it was necessary to obtain their confidence by invariably just treatment. Though often-times called upon to admonish and punish them, I felt that this should be done in such a way as to repress that which is evil, and to excite the good that is in them; and when punishment is necessary, that it should be inflicted in such a way as not to excite sympathy. The feeling that one carries to a convict, that feeling you will surely awaken in him. If you are gentle with him he will soon become ashamed of his irritableness and excitabilities. When men are to be corrected or rebuked, and the proper effect is desired, they must be made to feel that they deserve the punishment, and that it is inflicted more in pity than in anger. Few even of the worst criminals have lost all faith, and hope, and aspiration, and a yearning at times for things more pure and true; and these attributes can be stimulated to increased action. The convict still possesses some elements of self-sacrifice, and I have found that many of the most uncontrollable prisoners in the Kingston Penitentiary have endeavored to restrain their passions, and have become much more obedient to the rules, since they began to look upon me as their friend rather than as their hard task-master, and the officers under me, as a parcel of petty task-masters. To stir up men's evil feelings, and to excite the lower part of their nature, only makes them reckless, hardened demons; whilst these same men under different treatment may at least be human. They become ashamed of their bad conduct and strive to do better in the prison, and when they leave it, instead of harboring feelings of revenge against those who have been placed over them, as well as against society at large, they become softened, repentant, and resolve to do better in the future than in the past. These, I have no doubt, are the honest purposes of many who leave the Institution, and those good resolutions are only broken when the intoxicating cup is again placed to the lips, and reason becomes dethroned.

Whilst, to the best of my ability, governing the convicts in this Institution by

uniformly kind and manly treatment, I have been invariably firm, ruling them by a consistent discipline, requiring a punctual and prompt obedience of all orders and rules.

Good results are already shown by this mode of treatment. The prisoners are less irritable, and appear to be much more contented, and if I may use the word, happy—than when I assumed office. In this state of mind they work better, and are more healthy than ever before. They feel that I take a personal interest in them, and many say they are *ashamed* to do anything to displease me. So that if I have hard and irksome work, there is some compensation in the thought that some six hundred of our fellow-creatures are less miserable than when I came amongst them.

The discipline which I desire to enforce is not strict repression, but rather to teach, improve, and hence reform the convict. I am happy to say that my views on this point are fully carried out by the matron, who so ably manages the Female Department of this Penitentiary.

The Directors have authorized and initiated many great improvements in the prison during the last year.

The rations of the convicts are good in quality, and sufficient in quantity. It has not been easy to give variety in the cooking, but the steam apparatus now provided will soon obviate that difficulty. I *regularly* inspect the beef, flour and potatoes, and am satisfied they are of the quality contracted for. The proper dieting, cleanliness and clothing of convicts is very important. They preserve health, promote industry, and tend very much to keep up discipline. If a convict's physical comforts are neglected, you cannot convince him that you have any great concern for his moral welfare. He may listen to good advice, but it will all pass for idle talk if he is fed on bad food, clothed with indifferent garments, confined in a dark cell from the time he quits work in the evening until rising time next morning, made to sleep on a hard bed with insufficient covering, and forced to breathe a foul, cold atmosphere. Under these circumstances he will rise in the morning, languid, unrefreshed, moody, and filled with discontent and anger toward everybody and everything around him. He will perform as little labor as possible, and will be very frequently on the sick list—or try to be there.

This, I am informed, was very much the case a few years ago, but it is all changed now. The convicts have not that fretted scowl upon their countenances which they formally had, and in most cases go about their day's work very much as men do outside who are amply paid for their labor.

The granting of a light by the Directors to each convict who has been three months without a report for bad conduct, is a great boon highly appreciated. Many are thus enabled to study and read in their cells from half past five until nine, p.m., who were kept in darkness previously.

All the convicts in the prison are taken out for an hour's walk around the yard every Sunday. Formerly only the most advanced class of good conduct men were allowed this privilege. As this exercise is undoubtedly healthful, the favor has been extended to all.

The gratuity for good conduct and industry, also initiated this year by the Directors, works well; it undoubtedly promotes both of these objects very materially.

The results of the labor of the convicts will compare favourably with those of other years. Much of the water front of the Penitentiary lot has been protected by crib work constructed during the year. Formerly the loose stones and earth filled in along the water's edge, were washed away by storms and high water. This is now prevented, and as the cribbing has been placed in deep water, the prison wharfage accommodation has been greatly increased. I trust further appropriations will be made to complete this work.

The stone department of the Institution is the most important and profitable branch of industry we have. Both dressed and undressed stone meets with ready sale in the western sections of Ontario. There are three regular quarry gangs, of 14 to 18 men each, constantly employed in the prison quarries, the stone from which is carried by tramway, either to the edge of the Penitentiary dock, and loaded into vessels, or into the stone-cutter's shop, when required for dressing.

All pertaining to this branch of prison industry is most efficiently managed by Mr. Trade Instructor Painter, who, with Mr. Adams over the carpenter department, Mr. Stewart over the blacksmith's and machinery, and Mr. Gemmill over the tailoring department, form a very efficient and superior staff of trade instructors.

The outside working gangs are more expensive to guard, but their labor is more profitable and healthful than that of men who work inside the walls.

The cash returns from the three contract branches of industry are not so large as formerly, because fewer men have been employed in them.

The contract system is greatly inveighed against in many quarters, and with my one year's experience I feel somewhat diffident about expressing a decided opinion. Of one thing there is no doubt, the convicts not employed in contract shops are more healthy and robust than those confined there. The same, however, may be said of men in some positions who are not convicts.

It is only fair to say that the contractors do not attempt to oppress their employés in any way. The prisoners can easily perform all the work required of them, and many earn considerable sums by over-work. The supervision too of these men is, as I have said, less expen ive than the cure of gangs outside, because one officer can guard and control fifty men in a room more easily than half a dozen men, frequently somewhat scattered, outside. In all self-sustaining Penitentiaries I think the contract system must prevail; and where the labor of the convicts is concentrated on one or two contracts the profits will be greater, chiefly because the cost of supervision will be less. I do not think, however, that the revenue desired from the labor of convicts is of so much importance as their judicious treatment and improvement.

The contracts now existing here will soon expire, and an opportunity will be afforded to make a change, if it is considered expedient to do so. If the contract system is abolished, there will be no difficulty, within a brief period, of finding profitable employment for the men, and if it is continued, a higher price should be obtained for their labor; because wages have advanced at least 30 per cent. outside, and supplies of all kinds have advanced in the same ratio since these contracts were entered into.

The past year, in consequence of long continued drouth, during mid-summer, was unfavorable to agriculture, yet the supply of excellent vegetables from the farm and garden has been much greater than ever before. The wise policy of the Directors in providing for a more liberal supply of manure will no doubt further improve the root crops—so important in promoting the health of the convicts.

In an institution such as this, the actual *cash* returns may not appear large, as compared with the cost of maintenance and construction, but when it is remembered that Rockwood Lunatic Asylum—surpassed by no building of its kind on this Continent—with all the Penitentiary buildings and boundary walls, &c., have been constructed by convict labor, the results are highly satisfactory.

The school connected with the institution, I regret to say, has not been in a prosperous state. I hope ere long to see a new re-organization and more efficiency.

The remission of five days per month, authorized by the Penitentiary Act, to convicts whose conduct and industry rank number one, is a great incentive to good behaviour. This remission and the hope of pardon encourages many to persevere in well doing in the face of great discouragements.

The number of men pardoned in 1871 is larger than usual. The Directors and others have, no doubt, been directing the attention of the Government to many cases where long sentence (in several instances over twenty years) had sufficiently condoned the offences for which the convicts were imprisoned.

I think a deliberate murderer should in all cases suffer death for his crime, but where there are mitigating circumstances sufficient to justify the Executive in sparing life, then hope might be given that a lengthened imprisonment of, say twelve years, and invariable good conduct might in time lead to release. As a rule, short sentences produce the best effect on the minds and morals of prisoners.

Punishments have been fewer and much less severe during the past year, than ever

before in the history of the institution ; and it is conceded by those who are in a position to make comparisons, that the discipline of the Kingston Penitentiary never was better than it is now.

Five convicts escaped during the year:—Oscar Byrnes, from Rockwood Asylum ; John Hannah, from an outside gang ; and Greenbury Steele, colored ; Benjamin Wilson, colored ; and Richard Neligan, white, from the hospital. Steele and Nelligan gained admission to the hospital by pretending to be sick, and Wilson, being the barber, visited that part of the institution almost daily, to shave, and thus had an opportunity of carrying in a false key, an iron bar, and other appliances, which were no doubt concealed in Steele's bed. Wilson then feigned sickness himself. The three were locked up in adjoining cells, and on the first stormy night afterwards, Steele opened his own and their cells with his false key, rigged in an ingenious way, and then with the iron bar sprung one of the window barriers and escaped. When outside, they stole a boat and escaped to the State of New York before day-light next morning. Steele and Wilson are again in goal at Boston, Mass., on a charge of burglary. A short clause in the Extradition Act, providing for an exchange of escaped convicts would prove advantageous on both sides of the line. Another colored convict, named Isaac Johnson, attempted to escape in September last, but was recaptured when about two miles from the prison, where some of the officers had surrounded him in a swamp. He was tried for the offence at last Assizes, and sentenced to three months' additional imprisonment here, which, with the loss of six months remission Johnson had gained, is equal to nine months.

I have practiced as much economy in prison management as I thought consistent with efficiency. When I assumed office there was much to improve and repair, particularly in the blacksmith's department. By a humane order of the Board, I was instructed to procure long boots for men working in snow and wet outside, which involved an immediate outlay of $400. The additional cost for lamps and oil is a considerable item, but of great benefit.

I have been somewhat more liberal than my predecessors to convicts going out, keeping, however, much within the maximum amount fixed by Act of Parliament. In this liberality I have only been carrying out the gratuity principle. The clothing now given to discharged convicts is much more varied, of a little better quality and neatly fitted and made. Formally a suit of discharged convict's clothing was as good as a label on the man's back—"Just turned out of the Penitentiary." Nearly always the same from year's end to year's end, without much attempt at a fit, either as to size or shape.

I submit herewith the statistical returns required by law. To those who have not time to analyze these tables, it may be interesting to see, almost at a glance, a brief statement of the cash cost for maintenance of the institution, and earnings of the convicts during the past year, as follows :

STATEMENT of Expenditure at the Kingston Penitentiary, for the year ending 31st December, 1871.

		$ cts.	$ cts.
Disbursements in 1871		112,254 09	
Increase of officers' salaries, from July to December, paid in 1872		2,313 75	
Claims against Penitentiary, December 31, 1871		6,318 99	
			120,886 83
LESS—			
Amount charged in above for material for Rockwood Buildings		2,604 95	
Amount charged in above for Penitentiary construction (for material)		8,628 30	
Amount charged in above for recapture of convicts Smith and Mann, 1870		1,709 95	
Amount charged in above for law costs incurred in 1870		1,156 12	
do	do Rockwood architects, &c., salaries	1,658 33	
do	do repayment of bones and leather sold in 1870	665 64	
Amount charged in above for valuation of prison property in years previous to 1871		300 00	
Amount charged in above for purchase of horses not fairly chargeable to maintenance		425 40	
			17,148 29
Net cost of Maintenance for 1871			$103,738 54

GENERAL SUMMARY of value of labor performed and material furnished by the several Departments of the Kingston Penitentiary, for the year 1871.

Name of Department.	Custom Work.		Rockwood.		Penitentiary.		Total.
	Material.	Labour.	Material.	Labour.	Material.	Labour.	
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Mason	1,356 65	11,237 27	.....	1,571 70	1,073 12	8,951 03	24,189 77
Carpenter	971 50	1,448 78½	355 63½	722 46	8,066 10¾	4,149 33	15,663 81¾
Blacksmith	31 44	120 14	245 73½	367 77½	2,208 82½	2,614 83	5,588 74½
Female	.....	754 74	.....	.....	.....	828 05	1,582 79
Prison shoe	31 41	12 00	.....	.....	1,667 68½	1,394 58½	3,105 67½
Tailor	1,089 50	371 75	.....	.....	3,596 35	1,485 00	6,542 60
Farm	.....	.....	.....	.....	634 31	1,138 00	1,772 31
Total	3,480 50	13,944 68½	601 37	2,661 93½	17,196 39½	20,560 82½	58,445 70¾

GENERAL SUMMARY of value of labor performed, &c.—*Continued.*

	Average No. Employed.	No. of Days' Work.	Rate.	$ cts.
			Per cent.	
Bakery	6	2,006	40	802 40
Wash-house	7	2,321	40	928 40
Stable and yard	10	3,005	30	901 50
Wood sawyers, pilers and carriers	13	4,098	25	1,024 50
Steward—In dining hall, kitchen, cellars, wings and dormitories, whitewashers, lampmen, &c	31	9,355	20	1,871 00
Drying and mending rooms (aged and invalids)	23	5,766½	10	576 65
Hospital Orderlies	6	1,976	30	592 80
Assistants to storekeeper, steward and trade instructors	5	1,550	40	620 00
Hall Orderlies	2	730	40	292 00
Assistants in gardens	2	620	40	248 00
Female (household work, cooking, nursing, &c)	15	4,672	20	934 00
Labour on shoe contract				12,916 70
do cabinet do				4,606 88
do lock do				8,448 20
				$93,208 73¾

The more prominent works upon which much of this material and labor have been expended are :—

First—The Warden's residence, which occupies a commanding position on the Penitentiary grounds, immediately opposite the main entrance to the prison. The greater portion of the stone used in the construction of this building is from the prison quarries, and all the labor in each department has been performed by the convicts.

Second—The South wharf and pier (previously referred to as being a work of necessity, in order to protect the prison property). These measure 410 feet in length by 22 feet in height, giving a face of 9,020 feet, 25 feet wide.

Third—The West wharf extension, which was required to give greater facilities for depositing stone, by extending the tram railway, and also for loading vessels directly from the stone trucks. The aggregate construction upon this work is 4,408 superficial feet.

The tram railway has been further extended into the Quarries to afford increased facilities for bringing out stone and also *debris* for filling in at the wharves.

Many necessary works of construction of minor importance have received attention, as well as the necessary repairs required in this large Institution.

A photograph gallery has been put up; an earth house erected; a fire-proof roof placed over the engine house; circular saw placed in yard to cut prison fire-wood; stone-flagged floors put into cabinet shop, engine house and new bakery; pointing prison walls, &c., &c.

I subjoin reports from Messrs. Painter and Adams, who have been acting Architects since Mr. Horsey left.

In conclusion, I have to express my thanks to the deputy warden, chief keeper, and other officers of the Institution, for the valuable assistance they have given me in its management.

I have the honor to be, Sir,
Your obedient servant,
JOHN CREIGHTON,
Warden.

No. 12.—SURGEON'S REPORT.

KINGSTON PENITENTIARY, 20th January, 1872.

GENTLEMEN,—I beg leave to present my Annual Report of the Kingston Penitentiary, for the year 1871.

The hygienic condition of the Institution, for the past year, has been satisfactory.

Although the cases of Typhoid Fever admitted to hospital were more numerous than in the preceding year, yet, the type was much milder, and out of ninety-six convicts admitted to hospital labouring under this disease during the year, only two of them died of it.

The improved hygienic condition of the prison of late years, may be attributed to several cause; such as the removal of several sources of contamination of both the water and air within and around the Institution; the precautionary measures adopted to lessen the noxious influences of certain agencies that could not be removed altogether; the diminished number of prisoners confined within the walls; the greater variety of the dietary; the larger relative number of convicts employed at out-door work, and the consequently smaller number confined within the workshops.

There are several matters of an interesting nature, relative to the effects produced on the mental condition of the convicts, by the discipline and confinement in the prison, from its opening in 1835, to 31st December, 1871, which will be found in my Asylum Report for the year. It will be there seen that over one and half per cent. of all convicts sent to the Penitentiary became insane. The customary way, however, of framing statistics of that sort is to base the calculation on the population; I have therefore shown in one of the tables attached to the Asylum Report, that only a little over one-half of one per cent. of the annual population became insane.

The usual tables will be found appended; they have been carefully prepared by the excellent hospital overseer, Mr. Halliday.

I have the honor to be, Gentlemen,
Your most obedient servant,

JOHN R. DICKSON, M.D., F.R.C.S.E.,
Surgeon, Kingston Penitentiary.

Messrs. O'Neill, King, & Prieur,
Inspectors of Penitentiaries, Dominion of Canada.

ANNUAL RETURN of Cases treated in the Hospital, Kingston Penitentiary, for the year 1871.

Disease.	Remained.	Admitted.	Discharged.	Died.	Remaining.
Abscess	2	9	10	1	.....
Amputation	.....	1	1	.....	.....
Anæmia	.....	1	1	.....	.....
Apoplexy	.....	1	.....	1	.....
Ascites	.....	1	.....	1	.....
Asthma	1	3	3	.....	1
Boils	.....	12	12	.....	.....
Bronchitis	.....	2	2	.....	.....
Burns	.....	5	5	.....	.....
Cancer	1	.....	1	.....	.....
Cholerine	.....	4	4	.....	.....
Chorea	1	.....	1	.....	.....
Colic	.....	8	8	.....	.....
Concussion	.....	1	1	.....	.....
Constipation	.....	3	3	.....	.....
Contusion	1	42	42	.....	1

ANNUAL RETURN of Cases treated in the Hospital, &c.—*Continued.*

Disease.	Remained.	Admitted.	Discharged.	Died.	Remaining.
Debility	2	8	8	2	
Diabetes		1	1		
Diarrhœa	1	28	28		1
Dysentery	1	6	7		
Dyspepsia	1	4	5		
Eczema		1	1		
Epilepsy	1	4	5		
Erysipelas		10	10		
Febricula	6	93	94		5
Fever, Intermittent		6	5		1
Fever, Typhoid	2	96	95	2	1
Fistula in Ano		1	1		
Fracture		2			2
Frost Bite		2	2		
Gastritis		1			1
Hæmoptysis		1	1		
Hæmorrhoids		3	3		
Heart Disease		1	1		
Hepatitis		2	1		1
Hernia		1	1		
Hysteria		1	1		
Influenza	12	51	63		
Jaundice		1	1		
Lumbago		27	26		1
Malingering		8	7		1
Mania		8	8		
Melancholia		1	1		
Neuralgia	2	2	4		
Onyxia		2	2		
Ophthalmia		32	31		1
Orchitis		5	5		
Pharyngitis		1	1		
Phthisis	1	6	2	1	4
Pleurodynia		15	15		
Porrigo	2	1	3		
Psoriasis		1	1		
Rheumatism	3	22	25		
Scabies		10	10		
Sciatica	1		1		
Scrofula		7	5	2	
Sprain	1	9	10		
Stomatitis		2	2		
Stye		2	2		
Sycosis		1			1
Synovitis		5	5		
Syphilis		2	2		
Tonsilitis		8	8		
Torticollis		4	4		
Tumour		1	1		
Ulcer		4	4		
Whitlow		5	5		
Wounds	1	44	45		
Total	43	652	663	10	22
Suicide				1	

JOHN R. DICKSON, M.D., F.R.C.S.E.,
Surgeon, Kingston Penitentiary.

Annual Return of Deaths in Hospital, Kingston Penitentiary, for the year 1871.

No.	Name.	Age.	Disease.	When admitted.	Died.	Country.	No. of days in Hospital.	Remarks.
1	Dudley Gillman	64	Typhoid Fever.....	26th January, 1871.....	2nd February, 1871	United States ..	7	
2	Amos Kelly.....	29	Spinal Abscess.....	30th December, 1870	7th February, 1871.....	,, ..	39	Negro.
3	Edwin Peters	33	Typhoid Fever.....	13th March, 1871	26th March, 1871	Ontario	13	
4	John J. Chuckee	25	Scrofula.....	22nd June, 1871.....	18th July, 1871	,, ...	26	,,
5	Charley Medley	29	,, ...	3rd June, 1871	10th August, 1871.....	,, ...	68	,,
6	George Hogg	75	Debility.....	26th October, 1870	26th August, 1871.....	England.....	304	
7	Peter Hughes	63	,, ...	29th November, 1869....	13th September, 1871....	Ireland	653	
8	Robert Caswell.....	58	Ascites	25th August, 1871.....	5th October, 1871	,, ...	41	
9	Charles Rice	31	Phthisis	31st October, 1871	5th November, 1871.....	Ontario	6	
10	Charles Godbout.....	51	Apoplexy.....	21st December, 1871.....	23rd December, 1871	Quebec.....	2	
	Alansom Swazze	23	Committed suicide by hanging		20th January, 1871.....	Ontario		

25

John R. Dickson, M.D., F.R.C.S.E.,
Surgeon, Kingston Penitentiary.

STATEMENT of Accidents to Convicts in Kingston Penitentiary, for the year 1871.

Date.	Names.	Where Employed.	Nature of Accident.	Cause of Accident.	No. of days in Hospital.	Remarks.
Jan. 9....	William Grinness.....	Cabinet shop....	Loss of first joint of left thumb	By planing machine.....	36	
„ 20....	Peter Almonte.....	Stone shed.....	Contused wound of third finger, left hand.	By fall of stone	17	
March 5....	Henry J. Smith	Foundry.....	Burn of lip, cheek and left eye, causing disfigurement of the latter.....	By explosion of hot metal....	31	
„ 9....	Robert McCrudden ...	Cabinet shop....	Incised wound of index finger, left hand .	By planing machine.....	16	
April 15....	Thomas Allen	Piggery	Bite on right hip.....	By hog	15	
„ 24....	Jacob Hobson	Foundry	Amputation of first joint, third finger, left hand	By circular saw	30	
„ 27....	William Villiers	Quarry	Contused wound of third finger, left hand.	Crushed by fall of stone	18	
Oct. 7....	Daniel McRae.....	Stone shed.....	Fracture of left ankle joint	By fall of stone	86	Still in hospital.
Nov. 23....	Moses Tucker	Yard.....	Fracture of left leg above ankle joint.....	Caught by wheel of waggon whilst unloading stone.....	55	„
„ 27....	W. B. Brown.....	Stone shed.....	Incised wound of left thigh (femoral artery severed)	By stroke of axe whilst splitting wood	21	
Dec. 11....	B. A. Barnard.....	Cabinet shop....	Incised wound of left wrist	By slip of chisel.....	10	

JOHN R. DICKSON, M.D., F.R.C.S.E.,
Surgeon, Kingston Penitentiary.

No. 13.—PROTESTANT CHAPLAIN'S REPORT.

CHAPLAIN'S OFFICE, December 31st, 1871.

To the Directors of Penitentiaries, &c., &c.

GENTLEMEN,—I do not think it necessary, at this time, to report to you so fully as I have been accustomed to do, especially as I did not resume my duties until more than half the year had passed away. I believe the more spiritual work here had been faithfully done in my absence by my curates, the Rev. Messrs. Bousfield and Plees. I feel it my duty to bear witness to the sincerity and devotion of those gentlemen.

Since my return, as far as health and circumstances admitted, I have applied myself to the same work, in preaching to them the Word of God, in personal conversation and instruction; in visiting the sick, and in prayer. The seed has been sown among them, and I hope it may bring forth fruit in its season.

The public services are animated and interesting, and attract hearers and worshippers from beyond the walls. During these services perfect order always prevails. The singing of the choir is much admired, and its numbers are largely increasing.

On Christmas, at the celebration of the Holy Communion, fifty prisoners came forward and communicated.

The Directors will observe, from the enclosed returns, that the books in the library are duly appreciated, and read by most of the convicts able to read. The library has many choice books, full of useful and moral instruction, and so destitute of sectarianism and religious controversy, that they would be quite suitable for a general Library. As, however, many of them are out of repair, an addition of three hundred or four hundred volumes is much required. Four hundred dollars would supply this needed service. I hope also that $80 may be granted for the purpose of buying Bibles, prayer books, hymn books and catechisms for the year.

All that is necessary to say concerning the School has been stated in my quarterly reports.

All which is respectfully submitted.

I have the honor to be, Gentlemen,
Your obedient servant,
HANNIBAL MULKINS.

STATEMENT OF THE LIBRARY.

Whole number of books in the Library.....	1,026
Added during the year, none.....	—
Number of prisoners who read the books.....	252
Appropriation for books during the year 1871, as well as 1870.	—
Number of issues of books.....	3,690

P.S.—Although no grants have been made in the last two years for the library, the Directors have readily granted adequate sums for religions, and it is only right to add, that grants for the Library were not absolutely necessary in the last two years, yet the library could have been made far more attractive and acceptable by the addition of new books.

No. 14.—ROMAN CATHOLIC CHAPLAIN'S REPORT.

ROMAN CATHOLIC LIBRARY REPORT, FOR THE YEAR ENDING 31ST DECEMBER, 1871.

Number of volumes in Library....	412
Number added during the year.....	24

Number of convicts who used books	186
Appropriation outlay for Library	$18.50
Number of issues during the year	3,213

W. J. KEILTY,
Assistant Chaplain.

To T. J. O'Neill, Esq.,
Chairman of Board of Directors,
Kingston Penitentary.

I have the honor to submit, for your consideration, the Annual Report of the Catholic Chaplain of Kingston Penitentiary, for the year of grace ending December 31st, 1871.

Service is strictly carried out according to the prescriptions of the Catholic Ritual. The Holy Sacrifice of Mass is offered up each Sunday morning, and the Psalms of David chanted each Sunday afternoon. Catholic convicts are thus enabled to profit by every sacred ordinance of their religion. Happy and blessed effects must be expected therefrom, especially as the prisoners invariably assist at Divine Service, with all becoming respect and gravity. In fact, the great majority, I am sure, frequent the House of God to pray,—very few, it any, to scoff.

Moreover, the religious training of convicts is carefully superintended as a great means of reformation. Instruction upon points of doctrine and principles of morality is imparted all Sundays and Thursdays throughout the year. The men have thus ample opportunity to know what they should believe and practice if they wish through Christ to raise themselves to the standard of good Christians. Fruit, and abundant fruit, under God must be expected from those instructions, as the convicts on their side are remarkable for the attention they invariably give.

Another feature which deserves consideration is the desire they manifest for reading. This desire is encouraged as much as possible, and their reading carefully superintended. Only such books as are warranted by the highest standards are placed within their reach. This christianized enlightenment must have its due influence upon the minds of men who in the past were a prey to ignorance and its accompanying vices—men, the majority of whom were misguided and unfortunate rather than criminal and vicious.

I cannot speak in too high terms of the gentleman whom the Government appointed to the responsible position of Warden, and who rules the institution with so much prudence and ability. He is always discreet, just and merciful in his relations with the prisoners. He possesses the entire confidence of the latter, who respect him and look upon him as a model man. This influence of the Warden redounds to the good and benefit of every department connected with Kingston Penitentiary. The men in general are well disposed, and it is only consistent with common sense to suppose that men well disposed will attend service and listen to religious instruction with far more relish than otherwise, and with much greater profit to themselves and society.

In conclusion, I would wish to state that there are at present two hundred and sixty-three (263) men and twenty-one (21) women under my pastoral charge in Kingston Penitentiary. Deaths do not occur frequently—on an average six or seven per annum. In their illness the poor convicts are always most carefully attended by a priest and die fortified by the sacraments of the Church.

All of which is respectfully submitted.

W. J. KEILTY,
Assistant Chaplain.

KINGSTON PENITENTIARY, Dec. 31st, 1871.

No. 15.—MATRON'S REPORT.

KINGSTON PENITENTIARY,
(FEMALE DEPARTMENT,)
January 3rd, 1872.

To the Directors of Penitentiaries,
&c., &c., &c.

GENTLEMEN,—On reviewing the condition of this Department at the close of the year 1871, it affords me great satisfaction in being able to report to you that everything in connection herewith has progressed in the most gratifying manner—with an average of seven convicts more than in the previous year, the reports for breach of discipline have been less in number than in that year, and of a much less serious nature. I have also great pleasure in being able to state, that not one of the females discharged during the past two years has been recommitted.

The earnings of the convicts, as shown in the labor returns, amount to $1,560.20, the cash receipts to $684.40, being 244.39 in excess of last year.

I am, Gentlemen,
Your obedient servant,

MARY LEAHY,
Matron.

No. 16.—TRADE INSTRUCTOR ADAMS' REPORT.

KINGSTON PENITENTIARY, 9th February, 1872.

SIR,—I have the honor to submit, for your information, a Report upon the position of certain works in course of construction, and completed during the year 1871, so far as the work appertaining to the branch of service under my supervision is concerned, viz. :—the West Wharf extension, say, upon the old projecting portion of 118 feet, two faces, three feet have been added to its height, making 354 feet. Upon the receding portion made in 1869, there have been added to its height four feet, extending 252 feet in length = 1,008 feet (together with the tram-railway thereon.)

Upon the further extension of the same face, there have been added 375 feet in length and 8 feet in height, making 3,000 feet, of 12 feet wide—making in the aggregate 4,408 superficial feet. The cost of material for which amounts to $1,453 93 (exclusive of labor.)

The South wharf and pier have been constructed, which measure a line of 410 feet by 22 feet in height, giving a face of 9,020 feet (25 feet wide). The cost of material for which amounts to $1,851 98 (exclusive of labor).

The Warden's new house has been erected in the course of the year; the wood-work upon which, up to 31st October, cost $1,510 32, comprising doors, sashes, flooring and out-houses, and the tin-work and roofing costs $488 89, thus forming an expenditure for material only of $1,999 21 (exclusive of labor).

An earth-house has also been constructed in connection with the farm, the cost of which, for wood-work, to 31st December, 1871, is $70 83.

In consequence of a fire occurring in the engine-house, off the carpenters' shop, destroying the roof, it was deemed expedient to restore it in a more secure manner, and consequently it has been roofed entirely with metal and brick-work; the cost and supervision of this work having been chiefly borne by this Department, it becomes necessary for me to report the cost of material employed in its construction, the same amounting to $89 38½ up to 31st December, 1871 (exclusive of labor). This work, I may add, is not completed.

The railroad has been extended 530 feet, the estimated cost of which is $67 68 per 100 feet, forming an aggregate of $358 70 (labor included).

It was deemed advisable, for precautionary measures, to establish a photographing gallery, which has been constructed by this Department, and its cost has been (completed) $59 37½ (exclusive of labor). It was also deemed advisable to construct a wood-saw shed with circular saw, in connection with the machinery in the carpenters' shop, to cut the firewood required for prison use, and in furtherance of this object there has been expended, up to 31st December, for material only, $3 21. This work was not completed on 31st December, 1871.

Several other improvements in this Institution of minor import have been executed in the course of the year; and a note of their cost included in the statement or summary of the year returned by this Department under their respective heads.

I may add that the return of receipts for the year for "Custom" work, independent of the "Lunatic Asylum," amounts to $2,420 28, giving an average for the labor bestowed thereon of 65½ cents per diem for each prisoner employed thereon; this is in addition to the prison and Rockwood work, and the general aggregate of all work will give an average to each prisoner of 53·35 cents per diem.

I might add here that the cost of labor in constructing the wharves has been estimated (as well as for the other works) at 50 cents per diem, which is the uniform rate. This course is adopted from the fact of other Departmental gangs of laborers having been employed on the work at the same time; but in a work of this magnitude, the proper mode of estimating its value have been at the customary rate per lineal foot of timber employed, which would have materially increased the "estimated amount" of labor gains.

The addition of the foregoing works will increase the value of the real estate of this Institution in the aggregate sum of $7,720 06, as per following abstract:—

Description of Work.	Value of Material.	Value of Labour.	Total Value.
	$ cts.	$ cts.	$ cts.
West Wharf Extension	1,453 93	91 50	1,545 43
South Wharf	1,851 98	826 75	2,678 73
Warden's New House	1,999 21	784 44	2,783 65
Earth House	70 83	49 00	119 83
Engine House Roof	89 38½	26 50	115 88½
Railroad Extension	.....	.....	358 70
Photographing Gallery	59 37½	30 00	89 37½
Wood-Saw and Shed	3 21	25 25	28 46
Totals	5,528 92	1,833 44	7,720 06

I have the honor to be, Sir,

Your most obedient servant,

JAMES ADAMS,

Carpenter and Trade Instructor.

To John Creighton, Esq., Warden,
Kingston Penitentiary.

No. 17.—TRADE INSTRUCTOR PAINTER'S REPORT.

KINGSTON PENITENTIARY,
14th February, 1872.

SIR,—I beg to submit the following Report on the progress and position of the several works executed by the Mason Department, during the year ending 31st December, 1871.

As will be seen by detailed return already submitted, the most important work performed during the past year by this Department has been the erection of a Warden's residence, built of uncoursed or "broken" pitch-faced ashlar, with sunk margin quoins; the windows and other dressings being of Ohio sandstone, moulded and wrought; the chimney tops being of Prescott white brick, capped with Ohio stone. The greater portion of the material used being of home production, consequently the labor of the Institution has been brought largely into use in its construction.

The material purchased has been Ohio stone for dressings; bricks for partitions, chimney breasts, flues and tops, and sand, the whole costing $1,073 12.

The estimated value of material and labor is $4,893 99.

The work next in importance is the continuation of West wharf to the line of street, and the construction of wharf along South front, the filling required for which has utilized the refuse stone and debris of the quarries. The value of this crib and wharf filling is $2,703 65.

The extension of Tram-railway along West Wharf, and the necessary following of quarries as they recede, is found to be of the value of $300 00.

Cabinet Engine house having been without floor (save the primitive one of earth), a floor of stone flagging has been laid of the value of $54.44.

Dining hall cellar, the wooden floor of which being in a very decayed state, it was thought advisable to lay a permanent and durable one of flagging. A large quantity was placed there (a considerable portion of which is now laid), valued at $640 00.

The pointing of penal prison walls was commenced, but work of a more urgent nature stayed its further progress, so that a small portion only was done worth, $46 50.

The foregoing constitutes the permanent improvements made during the past year.

The value of general repairs, white-washing, and jobbing (not being additions to real estate) is $1,062 22.

A detailed statement is also given in returns, shewing the value and quantity of Custom work, stone, &c., sold during the past year. Aggregates are as follows, viz.:—

Cut stone	$5,493 69
Rough do.	4,471 49
Lime	1,944 43
Broken stone	467 91
Labor on vessels	215 40
Making a Total of	$12,592 92

exclusive of lime and rough stone supplied to Rockwood Asylum of the value of $416 65, and cut stone, $126 65.

It is gratifying to be enabled to state, that the proceeds of the past year exceed that of any previous year; and while here, I may be excused for giving a comparative statement of the past three years, or for the time I have had the honor of serving the Institution, viz.:—

1869	produced	$4,749 00
1870	„	11,225 00
1871	„	12,592 00
While the preceding six years averaged		2,590 00
Out of which deduct payment for quarrying stone		1,116 00
Leaving but		1,474 00 net.

I am, Sir,
Your very obedient servant,
THOMAS PAINTER,
Mason Instructor.

To John Creighton, Esq.,
Warden.

No. 18.—FEMALE DEPARTMENT, STATISTICS.

EARNINGS in Female Department, Sundries, &c., for the year ending 31st December, 1871

Contract Shoe Shop	$	8 70
Cabinet Shop		39 15
Male and Female Prison		828 05
General sundries from private individuals		706 89
Total		1,560 20

Date.	Knitting and sewing.	Household work.	Washing and Ironing.	Cooking.	Nursing.	Total No. of working days.	Sick.	Punishment.	Total No. of women.	Total No. on household work.	Daily No. of applicants for medical treatment.	No. of Catholics.	No. of Protestants.	Total No. of women.
1871.														
January	688	211	122	52	26	1,099	115	.....	1,214	411	408	898	550	1,448
February	715	177	96	48	24	1,060	54	.....	1,114	345	346	784	516	1,300
March	775	221	113	54	27	1,190	25	1	1,216	415	208	838	558	1,396
April	696	203	98	48	24	1,069	11	.....	1,080	373	216	810	540	1,350
May	721	218	137	52	26	1,154	8	4	1,166	433	273	825	566	1,391
June	741	200	137	52	26	1,156	3	1	1,160	415	253	769	570	1,339
July	673	185	128	50	25	1,061	10	1	1,072	388	243	761	570	1,331
August	673	193	137	51	27	1,081	24	5	1,110	408	285	744	530	1,274
September	649	186	123	52	26	1,036	46	.....	1,082	387	366	709	539	1,248
October	618	181	97	52	26	974	53	3	1,030	356	208	696	533	1,229
November	568	185	107	52	26	938	50	.....	988	370	153	630	510	1,140
December	525	191	105	50	25	896	54	3	953	371	180	655	527	1,182
Sundays	.....	.....	.....	.....	.....	.....	.....	.....	2,443	.....	.....	.....	.....	.....
Totals	8,042	2,351	1,400	613	308	12,714	453	18	13,185	4,672	3,139	9,119	6,509	15,628

No. 19.—MATERIAL Used and Work done in Shoe and Saddler's Departments, from 1st January to 31st December, 1871.

	No. pairs boots and shoes made.	Value of stock.	Cost of making.	Actual value.
	Pairs.	$ cts.	$ cts.	$ cts.
Boots, coarse, made	178	311 50	213 60	525 10
do discharge, ,,	110	203 50	137 50	341 00
do footed, ,,	44	61 60	44 00	105 60
do gaiters, pegged ,,	18	24 30	18 00	42 30
do do sewed ,,	3	6 00	4 50	10 50
Balmorals, men's ,,	6	12 00	6 00	18 00
Cobourgs ,, ,,	234	269 10	234 00	503 10
Canvas slippers ,, ,,	428	235 40	235 40	470 80
Leather shoes ,, ,,	100	100 00	75 00	175 00
Boots, females' ,,	17	17 85	6 80	24 65
Shoes ,, ,,	9	5 40	2 25	7 65
Slippers ,, ,,	11	6 30	3 30	9 60
Boots and shoes repaired	1,509	377 25	377 25	754 50
Total Shoe Shop Department	.....	1,630 20	1,357 60	2,987 80
Harness made, sets	3	31 41	12 00	43 41
Repairing for stables	.....	27 60	27 10½	54 70½
No. fingerstalls made for year	988	9 88	9 88	19 76
Grand total for both	.....	$1,699 09	1,406 58½	3,105 67½

No. of men in shop,.....7

Kindly submitted to John Creighton, Esq., Warden, Kingston Penitentiary,

By THOS. H. WARDELL,
Trade Instructor.

KINGSTON PENITENTIARY,
January 5th, 1872.

No. 20.—STATEMENT of Income and Expenditure of the Kingston Penitentiary Farm, for the year ending 31st December, 1871.

DR.

		$ cts.	$ cts.
Seeds and Implements and Manure Account ..	.....	.....	634 31
Horse labor, 218 days, per day.....	218	2 50	545 00
Man's wages for attending pigs, per year.....	.....	.....	288 00
Pigs, feed from Dining Hall, per year.....	.....	.....	100 00
Convict labor on Farm, number of days 2,845, per day	2,845	0 40	1,138 00
Small Potatoes, 170 bushels from farm, used in Piggery, per bushel.....	170	0 25	42 50
Two Guards' pay, for one year each, per year .	.....	400 00	800 00
Four Cords of Wood for piggery, per cord ..	.....	5 00	20 00
Expenditure Account	.....	.....	$3,567 81

CR.

	$ cts.	$ cts.
Beets, 600 bushels, per bushel	0 50	300 00
Carrots, 261 bushels, per bushel	0 45	117 45
Cabbages, 14,000 heads, per head	0 10	1,400 00
Onions, 350 bushels, per bushel.....	1 50	525 00
Parsnips, 158 bushels, per bushel	0 60	94 80
Cauliflowers, 228 heads, per head	0 10	22 80
Lettuce, 16,000 bunches, per bunch	0 01	160 00
Potatoes, 1,270 bushels, per bushel	0 58	736 60
Potatoes used in Piggery, 170 bushels, per bushel.....	0 25	42 50
Pork, dead and live weight, per lb.....	0 07	860 57
Celery, 1,100 heads, per head	0 10	110 00
Parsley, 370 bunches, per bunch	0 03	11 10
Summer Savory, 44 bunches, per bunch	0 03	1 32
Tomatoes, 41 bushels, per bushel	0 50	20 50
Hay, 10 tons, per ton	18 00	180 00
Currants, 80 quarts, per quart.....	0 10	8 00
Leeks, 300 bunches, per bunch.....	0 01	3 00
Cabbage Plants, 14,000, per hundred.....	0 10	14 00
Income Account.....	.....	$4,607 64
Expenditure Account	.....	3,567 81
Credit Balance	.....	$1,039 83

ANGUS SHAW,
Farmer and Gardener.

No. 21.—Annual Return of Work done at Tailor Department, Kingston Penitentiary, 1871.

Number of Articles made.		Description.	Labor Value. Rate.	Labor Value. Amount.
		Officers' Uniform :—	$ cts	$ cts.
12	.....	Dress Coats	2 00	24 00
50	.....	Undress Coats	1 00	50 00
47	.....	Over Coats	2 00	94 00
65	.....	Vests	0 50	32 50
97	Pairs...	Pants	0 50	48 50
41	.....	Caps	0 25	10 25
				$259 25
		Civilian :—		
47	.....	Coats	1 50	70 50
30	.....	Vests	0 50	15 00
34	Pairs...	Pants	0 50	17 00
5	.....	Over Coats	2 00	10 00
				$112 50
		Prison Work, Woollen :—		
91	.....	Jackets	0 75	68 25
410	Pairs...	Pants	0 40	164 00
93	.....	Vests	0 50	46 50
314	.....	Caps	0 12½	39 25
200	.....	Stocks	0 05	10 00
64	.....	Conduct badges	0 05	3 20
620	Pairs...	Mitts	0 05	31 00
				$362 20
		Prison Work, Linen :—		
63	.....	Jackets	0 40	37 20
542	Pairs...	Pants	0 25	135 50
703	.....	Vests	0 20	140 60
71	.....	Belts	0 12½	8 87½
317	.....	Aprons, Canvas	0 05	15 85
9	.....	Over Coats for towers	3 00	27 00
5	Pairs...	Leggings	1 00	5 00
241	.....	Discharge Suits	2 50	602 50
10	.....	Discharge Over Coats	1 50	15 00
1	Pair....	Pants (single)	0 50	50
63	.....	Barber's cloths	0 03	1 89
5	.....	Signal Flags	0 30	1 50
9	.....	Coats dyed	0 30	2 70
				$994 11½
		Totals	.....	*$1,728 06½
8	Days...	Shrinking and rolling linen and cloth	0 40	3 20
14	,,	Splicing ropes	0 40	5 60
22	,,	Making carpets	0 40	8 80
11½	,,	Assorting Rags	0 40	4 60
26	,,	At church	0 40	10 40
51	,,	Photograph gallery	0 40	20 40
485	,,	Machine	0 40	194 00
823	,,	Changing room	0 40	329 20
308	,,	Messenger	0 40	123 20
,655	,,	Mending	0 40	662 00
309	,,	Cutting	0 40	123 60
3,712½	.....			†$1,485 00

* 4,709 days.=$1,728 06½

† 3,712½ days at 40 cents.=$1,485 00

Wm. Condon, 59 days making 16 pair prison pants, at 40c...			$ 6	40
„ (unwell) 18 days making 27 pair stocks, at 5c..			1	35
„ „ 12 „ 20 „ mitts, „ ..			1	40
89			$9	15
Average, 10¼ cents. (71 days nothing.)				
Pierre Collin, 11½ days making 6 linen vests, at 20c.....			$ 1	20
Unwell. Average, 10½ cents. (9½ days nothing).				
George Potters, 30 days making 2 pair linen pants, at 25c..			0	50
„ 2 linen jackets, at 40c.....			0	80
„ 15 „ vests, at 20c.....			3	00
Average, 14⅓ cents. (50 days nothing.)			$3	30
Robert English and Richard Chrysler, 40 days making 10 linen vests, at 20c.....		$	2	00
Two linen aprons, at 5c.....			0	10
17 pair linen pants, at 25c.....			4	25
Two linen jackets, at 40c.				80
Average, 17⅞ cents.			$7	15

No. 22.—CARPENTER'S DEPARTMENT.

ABSTRACT, shewing value of Material and Labor employed in the year 1871.

For what account.	Value of Materials.	Value of Labour.	Totals.
	$ cts.	$ cts.	$ cts.
Custom work.....	971 50	1,448 78½	2,420 28½
Lunatic Asylum.....	104 36	230 58	334 94
Rockwood building	251 27½	491 88	743 15½
Penitentiary work.....	8,016 10¾	4,149 33	12,165 43¾
Totals	$9,343 24¼	6,320 57½	15,663 81¾

KINGSTON PENITENTIARY, 7th February, 1872.

JAMES ADAMS,
Carpenter Trade Instructor.

No. 23.—GENERAL SUMMARY of Work done in BLACKSMITH DEPARTMENT, Kingston Penitentiary, for the year ending 31st December, 1871.

Work performed.	Value of Labor.	Value of Material.	Total Value.	Remarks.
	$ cts.	$ cts.	$ cts.	
For Rockwood Buildings.....	367 77½	245 73½	613 51	
Custom work.....	120 14	31 44	151 58	
Kingston Penitentiary	2,614 83	2,208 82½	4,823 65½	
Grand Total.....	$3,102 74½	2,486 00	5,588 74½	

R. M. STEWART,
Trade Instructor.

No. 24.—MASON DEPARTMENT.

ABSTRACT, shewing value of Labor and Cost of Purchased Material, for year 1871.

Description of Work.	Labour.	Material.	Total.
	$ cts.	$ cts.	$ cts.
Custom work	11,237 27	1,356 65	12,593 92
Penitentiary, permanent improvements	7,888 26	1,073 12	8,961 38
,, Repairs	1,062 77	.....	1,062 77
Rockwood, stone and lime	543 30	.....	543 30
,, 2,571 days' labour at 40 cts.	1,028 40	.....	1,028 40
	$21,760 00	2,429 77	24,189 77

GENERAL SUMMARY, shewing total earnings of each gang in Mason Department, Kingston Penitentiary, for year ending 30th December, 1871.

	Labour.		Material.			Total.
		Total.		Total.	Total.	
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Stonecutting Shop.						
Custom work for outside	3,658 63	.....	1,835 00	.....	5,493 69	
Warden's house	1,149 95	.....	704 30	.....	1,854 25	
Penitentiary repairs	522 02	.....	195 20	.....	717 22	
Rockwood Asylum	98 10	.....	28 55	.....	126 65	
Stock	329 50	.....	141 45	.....	470 95	
		5,758 20		2,904 56		8,662 76
Building Gangs.						
Keeper Burgess	2,270 02	.....	1,688 56	.....	3,958 58	
Keeper Lander, partly engaged at Rockwood	703 60	.....	246 13	.....	949 73	
		2,973 62		1,934 69		4,908 31
Railroad.	.....	3,274 55	.....	.....	.....	3,274 55
Quarries.						
Keeper Carter	2,516 43					
do Elsmers	2,638 75					
Guard Fitzgibbon	2,087 95					
do Bryson	2,297 60					
		9,540 73	.....	.....	.....	9,540 73
Limekiln.						
Holland	.....	349 60	1,699 75	1,699 75	.....	2,049 35
		$21,896 70	.....	$6,539 00	.....	$28,435 70

No. 25.—SUMMARY of Real Estate of Kingston Penitentiary, as on 31st day of December, 1871.

	$ cts.
Land	8,202 40
North Lodge	16,822 17
West Lodge	7,938 69
Main boundary walls and towers	61,110 30
Walls of female prison and Deputy Warden's yards	2,920 38
Walls of gardens	1,984 40
Rotunda and dome	10,579 47
North wing, main centre block	55,285 69
East and west wings, main centre block	122,172 08
South wing, main centre block	64,899 85
South workshops and additions	67,456 32
Dining hall buildings and kitchen	30,069 70
Hospital buildings	25,155 75
East workshops, storehouse, &c	22,285 78
West workshops, and engine house	18,103 37
Wash-house, smith's shops, &c	2,951 40
Stable and coach-house	3,699 21
Grading and forming land	4,249 03
Sewers and drains	13,940 75
Dry earth shed at south wall	119 83
Water supply, tanks, pipes and cisterns	8,332 01
Wharves and breakwater	12,648 19
Stone cottages and stable' corner Palace and King Streets	1,500 00
Two frame dwellings, west of prison	600 00
Dwarf walls, enclosing warden's plot	4,870 30
Warden's house	7,790 04
Solitary prison yard walls and stone cut for lodge	9,588 15
Farmhouse and outhouses	900 00
Barn	3,726 67
Piggery, &c.	1,352 45
Limekiln and limehouse	778 00
Slaughter-house	582 77
Tram railway	7,034 23
Dry kiln	1,623 42
Total	$601,273 80

No. 26.—Summary of Department Stock, 30th December, 1871.

		$ cts.
Armoury	1	3,309 63
Accountant's office	3	260 56
Architect's office	4	50 05
Blacksmith's shop	5	8,053 00
Bakery	12	547 42
Carpenter shop	14	4,013 22
Cabinet shop	22	240 24
Chapel, Roman Catholic	23	826 98
Chapel, Protestant	24	603 29
Chief Keeper's office	25	23 55
Deputy Warden's office	25	19 40
Foundry	26	367 85
Farm	27	2,246 85
Female prison	29	2,329 14
Hospital	37	1,711 08
Mason department	42	8,912 34
Mess room	49	59 35
North lodge	50	250 14
Oakum shop and Point woodyard	52	2,889 30
Photograph gallery	53	100 00
Real estate	54	601,273 80
Shoe shop, contract	55	311 92
School room	56	214 45
Shoe shop and saddlery, prison	57	624 07
Steward's department	60	11,764 85
Storekeeper's department	67	8,109 06
Tailor shop	72	2,777 95
Warden and keeper's hall	75	367 35
Warden and director's offices	76	313 75
Woodyard in prison	77	75 45
		$662,646 04

P. O'Donnell,
Thos. M'Carthy, } *Valuators.*

No. 27.—Comparative Statement of "Labor Account" for Labor engaged in the management of the Kingston Penitentiary, for the years 1870 and 1871.

Departments.	1870.				1871.			
	Average No. of Men.	Days.	Rate.	Value.	Average No. of Men.	Days.	Rate.	Value.
			cts.	$ cts.			cts.	$ cts
Bakery	5	1550	40	620 00	6	2006	40	802 40
Wash-house	4	1814	40	725 60	7	2321	40	928 40
Stable and Yard	9	2665	30	799 50	10	3005	30	901 50
Wood Sawyers, Pilers, and Carriers	13	4201	25	1,050 25	13	4098	25	1,024 50
Steward's Department, in dining hall, kitchen, cellar, dormitories and wings, white washers, lamp-men, &c	25	8021	20	1,604 21	31	9355	20	1,871 00
Drying and Mending Rooms, (principally aged and invalids	22	5678	10	567 80	23	5766½	10	576 65
Hospital Orderlies	7	2555	30	766 50	6	1976	30	592 80
Assistants to Store-keeper, Steward, and Trade Instructors	4	1240	40	496 00	5	1550	40	620 00
				6,636 86				7,217 25
Female Department					15	4672	20	700 80
								7,918 05
Hall Orderlies					2	730	40	292 00
Assistants in Garden					2	620	40	248 00
								$8,458 05

No. 28.

REVENUE.

The Dominion of Canada in Account with the Kingston Penitentiary.

DR. CR.

1871.	——	$ cts.	1871.	——	$ cts.
Jan. 31	To Drafts remitted this month .	3,039 12	Dec. 30.	By Moveables	22 87
Feb. 28	,, ,, .	1,746 59	,,	,, Rents	58 60
Mar. 31	,, ,, .	4,975 55	,,	,, Matron's Work Shop	663 42
April 30	,, ,, .	2,583 35	,,	,, Shoe Shop	14,040 75
May 31	,, ,, .	3,446 74	,,	,, Blacksmith Shop	228 20
June 30	,, ,, .	4,256 43	,,	,, Uniforms	256 85
July 31	,, ,, .	3,002 94	,,	,, Convict Labor.....	242 09
Aug. 31	,, ,, .	4,877 01	,,	,, Contingencies	2 27
Sept. 30	,, ,, .	3,884 03	,,	,, Cabinet Shop.....	3,488 03
Oct. 31	,, ,, .	3,817 31	,,	,, Iron works Shop	4,410 89
Nov. 30	,, ,, .	2,411 85	,,	,, Carpenter's Shop	2,256 02
Dec. 30	,, ,, .	2,929 23	,,	,, Clothing	907 41
			,,	,, Salaries refunded	542 73
			,,	,, Farms and Gardens.. ...	202 50
			,,	,, Saddler's Shop.....	566 35
			,,	,, Tailor's Shop	116 56
			,,	,, Prison Shoe Shop.....	9 08
			,,	,, Barrels	100 05
			,,	,, Oakum	38 70
			,,	,, Ration (for Hides & Skins)	1,237 68
			,,	,, Mason's Department.....	11,584 10
		$40,975 15			$40,975 15

D. McINTOSH,
Accountant.

KINGSTON PENITENTIARY,
30th December, 1871,

No. 29.

EXPENDITURE.

The Dominion of Canada in Account with the Kingston Penitentiary.

Dr. Cr.

1870.		$ cts.	1871.		$ cts.
Dec., 31	To Balance	945 81	Jan. 17	By Warrant to pay accounts	2,937 49
1871.			Feb. 1	Penitentiary officer pay list for January	3,740 41
Dec. 30	Prison buildings	8,628 30	,, 1	Rockwood ,, ,,	133 32
,, 30	Chairman's private apartments	63 00	,, 24	Warrant to pay accounts	4,876 47
,, 30	Salaries	43,490 27	March 1	Penitentiary officer pay list for February	3,674 60
,, 30	Carpenter shop	2,577 98	,, 1	Rockwood ,, ,,	191 65
,, 30	Blacksmith shop	1,813 06	,, 23	Warrant to pay law costs.....	622 70
,, 30	Tailor shop	44 06	,, 23	,, accounts	4,835 77
,, 30	Matron's workshop...	13 23	April 1	Penitentiary officer pay list for March	3,651 27
,, 30	Uniform account.....	3 38	,, 1	Rockwood ,, ,,	133 32
,, 30	Armoury	2 67	,, 1	Warrant to pay accounts	1,249 95
,, 30	Shoes	231 00	,, 1	,, ,, ...	400 00
,, 30	Clothing.....	6,384 19	May 1	Penitentiary officer pay list for April	3,728 59
,, 30	Fuel	7,095 04	,, 1	Rockwood ,, ,,	133 32
,, 30	Tobacco	366 00	,, 3	Accountable warrant.....	1,000 00
,, 30	Whiskey and Ale	72 72	,, 19	Warrant to pay accounts	10,711 68
,, 30	Store...	108 35	June 1	Penitentiary officer pay list for May.....	3,628 82
,, 30	Contingencies.....	888 33	,, 1	Rockwood ,, ,,	133 32
,, 30	Stable	2,756 52	,, 1	Warrant to pay accounts	8,749 00
,, 30	Runaway Convicts..	1,741 35	,, 30	Penitentiary officers pay list for June	3,555 66
,, 30	RomanCatholicChapel	102 60	,, 30	Rockwood ,, ,,	133 32
,, 30	Valuation	320 00	July 11	Accountable warrant.....	1,000 00
,, 30	Suspense	6 99	,, 31	Warrant to pay accounts	7,377 65
,, 30	Boiler inspection.....	15 00	Aug. 1	Penitentiary officer pay list for July.....	3,568 11
,, 30	Freight and charges..	40 61	,, 1	Rockwood ,, ,,	133 32
,, 30	Protestant Chapel....	113 80	,, 21	Warrant to pay accounts	4,260 96
,, 30	Kitchen	71 25	Sept. 1	Penitentiary officer pay list for August	3,618 14
,, 30	Saddler's shop.... ...	259 62	,, 1	Rockwood ,, ,,	133 32
,, 30	Rockwood Buildings..	2,604 95	,, 25	Warrant to pay accounts	6,415 60
,, 30	Stationery.....	74 18	Oct. 1	Penitentiary officer pay list for September	3,580 30
,, 30	Tools.....	16 50	,, 1	Rockwood ,, ,,	133 32
,, 30	Postages.....	105 50	,, 12	Warrant to pay disbursements.	772 98
,, 30	Printing and advertising.....	332 90	,, 23	,, accounts.....	3,767 90
,, 30	Prison shoe shop	1,931 92	Nov. 1	Penitentiary officer pay list for October.....	3,569 05
,, 30	Washing	325 71	,, 1	Rockwood ,, ,,	133 32
,, 30	Light	1,113 74	Dec. 1	Penitentiary officer pay list for November.....	3,574 22
,, 30	Moveables	429 94	,, 1	Rockwood ,, ,,	133 32
,, 30	Cartage	7 96	,, 15	Warrant to pay accounts	5,461 54
,, 30	Photograph gallery...	84 70	,, 20	,, ,, ...	2,821 45
,, 30	Rations	19,119 21	,, 30	Penitentiary officer pay list for December.....	3,492 81
,, 30	Convict travelling allowance.....	2,357 00	,, 30	Rockwood ,, ,,	133 32
,, 30	Hospital.....	968 81			$112,301 29
,, 30	Law costs	1,156 12			
,, 30	Farm and garden	644 31			
,, 30	Stone	1,084 20			
,, 30	Interments	2 00			
,, 30	Brushes	5 50			
,, 30	Petty cash.....	788 00			
	Balance	993 01			
		$112,301 29	1871. Dec. 30	By Balance	$993 01

D. McIntosh,
Accountant.

Kingston Penitentiary, 30th December, 1871.

No. 30.

STATEMENT of Debts owing the Kingston Penitentiary, as on 31st December, 1870, and as on 30th December, 1871.

		1870.	1871.	Total.
$ cts.		$ cts.	$ cts.	$ cts.
	William Ford, jun		47 50	
	Rockwood Lunatic Asylum	1,540 48	569 24	
41 48	*Cameron and Mudie		47 99	
	Corporation of Portsmouth		92 38	
	John Flanigan		47 55	
	Captain Cooper		123 75	
	*Dr. Betts		11 90	
	*Donnelly		115 06	
	Davis and MacRae		199 50	
	H. Corby & Son		11 30	
	Thomas Overend		106 42	
	C. E. Britton		57 45	
	*B. M. Baker		440 80	
	*E. R. Welch & Son		13 16	
	Mrs. Wilson		15 00	
	*James Swift & Co		25 00	
	N. L. Steiner		94 55	
	J. H. Henderson & Co		10 70	
	Kelly & Howard		16 81	
	Lindsay Jail		289 00	
	*Kingston Gas Co.		300 00	
	*J. Noble		22 89	
	A. Chown		31 50	
	*R. M. Horsey		15 45	
	*McKelvey and Birch		10 53	
	*George Newland		104 71	
	*Kingston General Hospital		19 80	
	Carruthers & Co		25 60	
	James Gibson		15 00	
	C. Bounsall		22 40	
	*John Bowey		28 08	
	*George Chaffey & Son		121 00	
3 05	*Petty debts		58 94	
	Bad and doubtful debts		7 25	
	Old petty debts	210 43		
	Old bad and doubtful debts	559 36		
	*James Nimmo	39 50		
	Andrew Brooks	18 00		
	Herkimer Hamilton	18 20		
1,252 37	*W. C. Evans		2,669 27	
383 07	*S. T. Drennan	2,100 05	1,221 53	
890 20	*Thos. M. Thompson	68 75	1,788 38	
		$4,554 77	$8,797 39	$13,352 16

* Since paid.

D. McINTOSH,
Accountant.

No. 31.—STATEMENT of Claims against the Kingston Penitentiary, as on 30th December, 1871.

	$ cts.
M. Morrison	1,451 30
G. S. Hobart	78 85
John Cunningham	34 91
S. Muckleston & Co	286 94
Aaron Smith	30 80
Boyd Caldwell	323 68
Johnson Day	120 00
William Reid	1,343 26
Michael Quinn	16 76
S. Chown & Sons	4 00
Thos. McAuley & Co	23 92
W. McRossie	236 74
W. C. Evans	22 37
Kingston Post Office	15 75
A. Livingston	579 60
Cataraqui Cemetery Co	10 00
James Neish	16 12
James Shannon	35 75
T. & R. White	12 84
Fraser & George	147 80
John Lovel	13 20
Davidson & Doran	1,198 50
Thompson & Dodd	15 90
	$6,318 99

D. MCINTOSH,
Accountant.

KINGSTON PENITENTIARY, 30th December, 1871.

No. 32.

STATEMENT OF LABOR PERFORMED BY CONVICTS EMPLOYED UNDER CONTRACT FOR 1871.

1st. CABINET WORK.—Contract entered into with Samuel T. Drennan, on the 23rd day of July, 1865, for the space of five years, for the labor of 50 convicts; 13,162½ days at 35 cts. per day = $4,606.88.

2nd. MALLEABLE IRON WORKS.—Contract entered into with Messrs. Thompson, Knox & Co., on the 20th day of September, 1364, (transferred to Mr. W. W. C. Evans, on the 2nd day of January, 1366,) for the space of five years, for the labor of 250 convicts, subsequently reduced to 100 convicts with consent of the Inspectors, as per minute of 28th September, 1865; 21,102½ days, work performed, at 40 cts. per day = $8,448.20.

3rd. SHOEMAKING.—Contract entered into with Messrs. Thomas M. Thomson, T. J. Claxton, and G. Offord, on the 1st day of August, 1868, for the space of four years, for the labor of 100 convicts; 32,291¾ days, at 40 cts. per day = $12,916,70.

ROCKWOOD ASYLUM.

MEDICAL SUPERINTENDENT'S REPORT.

ROCKWOOD ASYLUM,
KINGSTON, 13th January, 1872.

GENTLEMEN,—The time has arrived for me to present another Annual Report on matters connected with this Asylum, and I apply myself to that duty cheerfully.

By the kind permission of the Honorable the Postmaster General, who was at that time acting for the Honorable the Minister of Justice, I had the great pleasure and profit, during the past summer, of attending the Annual Meeting of Superintendents of Asylums of the United States and Canada. If our Government were aware of the vast importance of the discussions that arise at those annual gatherings,and of the real amount of good that results from them, they would make ample provisions for the Superintendents of our Asylums to attend them, instead of expecting them to request permission to do so.

In the United States the people are well aware of the benefits that have already resulted from the annual conferences of so many gentlemen who make insanity and its treatment a special study, and provision is there made, not only for their Superintendents to that assembly, but, they also provide the necessary funds to enable them to do so.

The statistical tables we have been accustomed to publish in Canada hitherto have been rather meagre; and, with a view of contributing somewhat to the general desire for more extensive information about our Asylums and their management, I have this year prepared an extended series of them, although doing so has entailed a vast amount of labor. When these tables have been prepared, however, they can readily be extended from year to year by adding the operations of each succeeding one.

An immense amount of useful information will readily be derived from extended tables of this sort; as by comparing similar ones from a large number of Asylums, we will be able to gain a more thorough knowledge of the different phases presented by the mysterious disease to which they refer.

Most Asylums publish more numerous tables than I have now prepared, but Rockwood is peculiarly constituted and governed, it therefore requires some of a special kind only adapted to itself, without which, however, its history would be incomplete.

I respectfully request that I may be furnished with at least one hundred and fifty copies of this Report, stitched in covers by itself, to enable me to exchange with those gentlemen who kindly furnish me with theirs. Such a request will no doubt appear strange to Superintendents of Asylums in the United States, many of whom are supplied with 2,000 to 3,000 copies of their own Reports for distribution.

A great many people feel a good deal of repugnance to lunatic asylums, and this has a most prejudicial effect, as it often prevents them, when their friends are seized with insanity, taking advantage of the best and most hopeful mode of treatment, which can nowhere else be so efficiently afforded. This feeling is in a great measure attributable to the part that the public are not made sufficiently acquainted with the working of those institutions, and always associate them in their own minds with dungeons, handcuffs, manacles, and all other modes of restraint and torture which have long since been discarded in Asylum management. Although Rockwood Asylum is, by law, declared to be part and parcel of the Kingston Penitentiary, yet, it is not in any sense a punitive institution, and not more than a tenth of its present inmates are convicts.

If the friends of our patients would witness our monthly dancing parties, they would see the utmost decorum maintained, and the utmost enjoyment depicted on every countenance; or if they would visit our church on a Sabbath afternoon, they would see how devoutly our patients enter into and enjoy the exercises, and hear how sweetly they sing; or if they could have seen them at our last Christmas dinner, how astonished they would have been to witness with what propriety such a large number of patients conducted themselves.

For the information of the friends of our patients, I here insert the description of our Christmas dinner, copied from the "Kingston *Daily News*."

"We were highly delighted on visiting Rockwood Asylum. On entering the outer hall we observed the walls and ceiling beautifully ornamented with evergreens and artificial flowers, the latter made by the patients. But on passing into the main hall and the corridors branching east and west from it, we found all these apartments most tastefully decorated. There were eight tables spread in the main hall, and one very long one in each of the two corridors, making an aggregate length of tables of three hundred and forty-eight feet. The attendants and several of the patients were busily employed placing splendidly cooked viands on the tables, which were well covered in exceedingly neat and tasteful order with turkeys, geese, fowls, roast beef, plum pudding, and all other things in keeping for a choice Christmas dinner. Three hundred and nineteen (319) patients sat down at these tables, and conducted themselves in such an orderly and decorous manner as might well put to the blush many persons of reputedly sound mind, who sit down at public dinners in other places. The patients sang in excellent style that beautiful old Christmas Anthem, "Hark, the herald angels sing," a lady playing the accompaniment on the parlor organ, after which, a blessing being invoked, dinner commenced, and it was really refreshing to see how the patients enjoyed themselves. Dinner being finished, the organ was again put in requisition, and the patients sang several pieces of sacred music in charming style, with a great deal of feeling and pathos. Several solos were rendered by the patients; one of them sang, beautifully, "Mary at the Saviour's Tomb." Another one sang equally well the hymn commencing with the words, "Holy, Holy, Holy, Lord God Almighty." A duet was sweetly and tastefully sung by two female patients.

"There were several ladies and gentlemen present, both from Kingston and Toronto, and many of them said they could scarcely imagine that they were in the midst of so many lunatics, as they were so very orderly and so thoroughly under the control of the officers of the Asylum.

"The visitors and the patients enjoyed themselves very much for a few hours after dinner. Tea was then served, after which, a patient chanted very nicely, "The Prodigal Son." The evening hymn was then sung, and the Rev. Mr. Dobbs wound up the proceedings by asking the Divine blessing; the patients in the most orderly manner then retired."

No greater evidence of an advanced civilization can possibly be afforded than that furnished of late years in the management of well-conducted Asylums, by the great improvements introduced for treating the insane. What anklets, hand-cuffs, shackles, straight-jackets and the lash failed to accomplish in years gone by, we now see fully effected by kindness and sympathy, producing altered thoughts by presenting pleasing pictures to the mind, and thus dispel the morbid gloom that reigns there.

By the kind recommendation of the Board of Directors, Parliament voted a sum of money to purchase some books and articles of amusement for the patients. I have procured a nice lot of books to form the nucleus of a library, to which, I hope to make additions from time to time; I have also procured a good magic lantern and dissolving view apparatus, with a selection of slides, which will no doubt amuse the patients very much, and tend to enliven the dreary winter evenings. I also hope to obtain other kinds of amusements, and I will endeavor to procure some suitable pictures to ornament the walls, and thus make a more pleasing prospect than our naked walls now present.

The new boiler has been procured, and I hope it will soon be in position and in working order; this additional boiler will, no doubt, tend to improve the ventilation, as the four boilers will enable the engineer to have at command a sufficient head of steam at all times to heat the coils of pipes in the north-eastern and north-western towers, and thus maintain a steady exhausting power on the foul air shafts terminating there, which he has not been able to do hitherto.

The increased number of boilers, however, will not remedy the unequal distribution of heat throughout the building. To do so, it will be absolutely essential to have steam pipes placed in the coldest dormitories to heat them by direct radiation. With that object in view, I have instructed the architects to procure a sufficient quantity of inch pipe to do so, and they have taken the necessary steps to carry out my instructions.

With the view of affording evidence of the unequal distribution of heat, I required the keepers and nurses, in their respective wards, to mark the exact temperature in each corridor and associated dormitory at eight o'clock, a.m. ; twelve o'clock, noon; and four o'clock, p.m., daily, during the month of December.

The examination of those sheets show that the associated dormitories averaged throughout the month, thirty (30) degrees lower temperature than the corridors to which they respectively belong.

The impropriety must be at once apparent to every one, of compelling helpless invalids to retire for the night to rooms thirty degrees colder than those in which they spend their day; and the faulty ventilation increases their discomfort and danger, because the keepers are compelled at times to block up the mouths of the exhaust flues, to protect the patients from the injurious consequences of allowing the cold down drafts that blow through them.

As the full number of boilers has now been procured, which Mr. Garth estimated would be sufficient for the purpose of heating and ventilating the building in its present condition, he should be requested to devise a remedy for the existing defects, and that remedy to my mind is perfectly plain, as it would be to any person who has paid much attention to, and thoroughly studied the subject of forced ventilation.

I think it is a sad pity to continue to light this magnificent building with coal oil, as no matter how carefully managed it is neither a safe nor a suitable light for a Lunatic Asylum, and I have in some lamps substituted olive oil for it. As a gas house was built and pipes laid all through the House some time ago, it is to be regretted that the orginal intention of manufacturing gas on the premises for our own use has been abandoned.

Our out door works and improvements were carried on last summer with as much vigor as during the two preceding ones, and with what results will be at once apparent from the following extract from the excellent Report of Mr. Langmuir, the Inspector of Asylums for the Province of Ontario. When writing of the desirability of the Province purchasing Rockwood Asylum from the Dominion, he reported : "That all the works per-"formed during the past three years on the grounds of Rockwood Asylum, through which "a *barren common* has been converted into *highly ornamental grounds*, with *beautiful* "*Parterres, walks and terraces*, has been done by the Ontario patients."

Not only have those beautiful surface improvements been made to which Mr. Langmuir refers, but we have quarried the outcropping rocks down to several feet below the surface, and refilled the space with rubble stone, and such a top dressing of borrowed earth as has converted, what Mr. Langmuir calls a "barren common," into fruitful soil.

During the past year (1871), I have had patients performing the work of stone masons, bricklayers, carpenters, painters, quarrymen and labourers. I therefore take an honest pride in reporting that all the works and improvements to which Mr. Langmuir refers have not cost the country one shilling, as I have not employed any labor for the different improvements I have effected other than that which the patients afforded. I never force a patient however to work against his will, nor do I ever allow any of them to over work themselves. They usually work about seven hours a day, and in addition to the three ordinary meals, every man in all working parties is furnished with a pint of good warm coffee and a crust of bread at three o'clock daily. But, intoxicating beverages are not allowed under any circumstances. I am too well aware of the horrid curse habits of intemperance entail on those who indulge their appetites in that way, to allow poor people of enfeebled minds to be drenched with such stuff.

I think it is now full time that special Asylums should be established for that form of insanity known as methomania, where poor drunkards would be treated, as that form of insanity is one of the greatest misfortunes that ever befel any human being, as it not only renders its poor victims pitiable objects to behold, but it entails untold misery on their household and descendants. Some laws should be enacted in our Dominion to provide for the care-taking of poor drunkards, and protect them from injuring themselves or others, as they are, without any manner of doubt, lunatics with strong suicidal and homicidal propensities while laboring under their periodic paroxysms, which evince themselves at regularly recurring intervals as other form of recurrent mania do.

The only effectual way to deal with a confirmed drunkard is to treat him as we do those laboring under other forms of insanity, and Asylums established for that purpose are the only places where such cases could be treated satisfactorily.

It will be necessary to make a sort of running commentary on the appended tables, as many of them appear for the first time in this report.

No. 1. Is the customary table furnished in all our Annual Reports, shewing the movements of the patients for the year, it explains itself.

No. 2. Is one of the new series of tables and gives the entire admissions, discharges, and deaths since the opening of the Asylum on 25th June, 1855.

No. 3. Gives the counties from which all patients were received, except the convicts. This is a very interesting table, as it shews that the benefits conferred by this Asylum have not been of a local character, but have extended to every county in the Province of Ontario.

No. 4. Gives the former residence of all patients living in the house on the 31st of December, 1871.

No. 5. Gives similar information to that embraced in No. 4, but merely in reference to those patients for whose maintenance the Province of Ontario is charged.

No. 6. Gives the form of disease and complications in those admitted, recovered, and died, from the opening of the Asylum, and of those remaining in the house on 31st December, 1871.

No. 7. Gives the operations of the Asylum, year by year, from the commencement to 31st December, 1871. This is a very important table for reference, and gives the whole details of the Asylum for nearly sixteen years.

No. 8. Is the customary obituary table for the year.

No. 9. Gives the causes of death from the opening of the Asylum.

No. 10. Gives the expenditure and average for the year 1871.

The remaining tables in the series refer to criminal lunatics, and as the Asylum was originally intended for lunatics of that class, I give detailed statistics of their movements.

It would be a very interesting investigation to discover the number of patients of this class whose lunacy could be traced to the discipline to which they had been subjected in the Penitentiary, and to draw a distinction between those who showed the first symptoms of aberration of mind during their incarceration, and those who labored under insanity at the time they committed the crimes of which they had been convicted. It would also be very desirable to know in how many individual cases the plea of insanity had been urged at their trials, such information, however, is not furnished by the records of the Penitentiary, nor have I any means of acquiring it. It would be manifestly unjust to attribute every case of insanity that occurs in the prison, to the treatment which the convict has received there. He may have been laboring under a hereditary taint, and in all human probablity the disease would have become devoloped in any locality, or under any circumstances in which the convict might have been placed; with the view, however, of investigating this matter approximately, I have framed several tables having special reference to this class.

No. 11. Of the series is the first one devoted to convicts. It shows the number of criminal lunatics sent from the Provincial Penitentiary to the Provincial Lunatic Asylum of Toronto before Rockwood Asylum was opened, and gives certain details in reference to them.

There were in all twenty-one patients sent to Toronto; sixteen men and five women: of these, five men and two women were sent from Toronto to Rockwood Asylum, and four men and two women were returned to the Penitentiary.

No. 12. Gives the number of criminal lunatics that were received into Rockwood Asylum from the Penitentiary, from the 25th of June, 1855, to the 31st of December, 1871, and shows how they were disposed of.

During the stated period one hundred and twenty-two men and nine women were received, of these, thirty-four men and four women recovered and were discharged at the expiration of their sentences. Thirty-four men recovered, whose sentences had not

The remaining five tables were carefully prepared by the steward, the matron having furnished the information in reference to her department.
expired, and they were returned to the Penitentiary. Thirteen men and two women died, and forty-one men and three women remained in the Asylum on the 31st December, 1871.

Of those remaining at the last date, the sentences of seventeen men and two women had expired, and they can not therefore be returned to the Penitentiary again ; so, on the 31st of December, 1871, we had only twenty-four male convicts and one female over whom the Penitentiary can exercise any control, and it can only do so, if they become restored to a sound state of mind again.

Tables 13 and 14 interest the Asylum authorities in a pecuniary point of view. The former gives a list of the convicts whose maintenance has been charged to the Province of Ontario since the expiration of their respective sentences, all of those convicts having been convicted at Courts held in Ontario. It will be seen, on looking at this table, that the Province of Ontario has been required to pay for the maintenance of some of those people as far back as from 1858.

I refer to this matter particularly, because, several convicts who were sent to the Penitentiary from the Province of Quebec, were declared to be insane, and were transferred from the Penitentiary to this Asylum, but since the expiration of those convicts' sentences, the Province of Quebec has not paid anything towards their maintenance. I think this is manifestly unjust, and Quebec should be required to pay for the maintenance of those lunatics or else be required to remove them to one of her own asylums.

No. 14, Gives the number of convict lunatics from the Province of Quebec ; the date of expiration of sentence in each case, and the amount chargeable to Quebec for the maintenance of these lunatics, based on the rates that are paid by the Province of Ontario.

No. 15, Gives a list of the crimes of which the convict lunatics were convicted.

No. 16, Shows the number of lunatics sent to Rockwood Asylum from the Provincial Penitentiary, from the 25th of June, 1855, to the 31st of December, 1871 ; also the per centage of convicts that were found to be insane in the Penitentiary during that time, basing the calculation on the population of the Penitentiary.

This is a very interesting table, and the personal knowledge I possess of the history of all convicts who became insane since 1851, enabled me to prepare this table with a great deal of accuracy.

In 1851 I had the honor to be appointed a Commissioner in lunacy, with special reference to criminal lunatics confined in the Penitentiary, so that these who were declared to be insane since that date, came under my personal observation.

This table reveals the fact, that a little over a half of one per cent. of the convict population of the Penitentiary became insane during the past fifteen years and six months.

No. 17, Shows the per centage of convicts that became insane in the Penitentiary, from 1st June, 1835, to 31st December, 1871, embracing a period of nearly thirty-six years. This calculation is based on the number of convicts admitted to the Penitentiary during the above period, and not on the population. It reveals the startling fact, that of all the convicts admitted to the Penitentiary since it was first opened to the present time, over one and a half per cent. of them became insane.

These figures, however, dwindle into insignificance when compared with some prisons in the United States, when they were conducted on the solitary plan ; for instance, the State Prison of Rhode Island, where we find that the inspectors, in their Annual Report for 1842 or '43, stated, that "of the thirty-seven convicts who have been committed to the prison, six have become insane, several others have at times exhibited slight symptoms of derangement," we have the melancholy spectacle presented of over sixteen per cent. of the convicts committed to a prison becoming insane, we must bear in mind, however, that the prison was at that time conducted on the solitary system, and that system was soon thereafter abolished there.

No. 18, Gives the officers and salaries.

No. 19, Shows the division of the labour, and the number of days' work performed in the year.

No. 20, Shows the quantity of out-dcor work achieved.

No. 21, Shows the amount of work performed in the tailors' and shoemakers' shops.

No. 22, Shows the quantity of produce of all kinds raised on the premises.

No. 23, Shows the quantity of work performed by the female patients.

I regret the length to which I have been obliged to extend this Report, but I could not present it in any more condensed form and embrace all the matters I considered it essential to put on record.

The exceedingly low figure that each patient has cost the country for the year just closed, as shown in table No. 10, must not to be taken as a basis on which to calculate the cost of maintenance of patients in an Institution of this sort. There were several favorable circumstances combined to bring the cost of each patient so low as $\$109\frac{39}{100}$ for the year. All our contracts were taken at exceedingly moderate rates; indeed, some of them very low; then we were able to manufacture and repair everything that was required to be worn in the building, by our own inmates, so that the expenditure of the past year must not form any criterion in estimating for the future.

I have the honor to be, Gentlemen,
Your most obedient servant,
JOHN R. DICKSON, M.D.,
Member Royal College Surgeons, England,
Member Royal College Physicians, London,
Fellow Royal College Surgeons, Edinburgh,
Medical Superintendent, Rockwood Asylum,
Kingston.

Messrs. O'Neill, King & Prieur,
Directors of Penitentiaries, Dominion of Canada.

TABLE No. 1.

SHEWING movement of Patients in Rockwood Asylum during the year 1871.

	Males.	Females.	Total.
In Asylum on 1st January, 1871	215	120	335
Ontario patients admitted during the year :—			
Admitted for the first time during the year	10	30	40
Those who had been in other asylums previously	1	3	4
Kingston Penitentiary patients admitted during the year :—			
From the Province of Ontario	7	1	8
do do Quebec	3	.....	3
Total under treatment during the year	236	154	390

DISCHARGED.	Males.	Females.	Total.			
Recovered	18	4	22			
Died	10	8	18			
Transferred to Toronto Asylum	.....	1	1			
Discharged died, and transferred	.....	.....	.....	28	13	41
Remaining in Asylum, 31st December, 1871				208	141	349
Average number of residents during 1871				212.99	127.46	340.45

No. 2.

SHEWING the Admissions, Discharges and Deaths, from the opening of the Asylum, 25th June, 1855, to 31st December, 1871.

	Males.	Females.	Total.
Warrant patients and others from Counties and County Gaols, as per Table No. 3	355	193	548
Convict Lunatics from the Penitentiary	122	9	131
Patients from Toronto Asylum	17	12	29
do Malden Asylum	.....	5	5
Convict from Penetanguishene Reformatory	1	.....	1
Military	5	.....	5
Total number of admissions	500	219	719

DISCHARGES.	Males.	Females.	Total.			
Recovered	170	36	206			
Died	122	42	164			
Total discharges and deaths	.....	.....	.....	292	78	370
Remaining in Asylum, 31st December, 1871				208	141	349
Average residents during 16 years and 6 months				83.28	36.75	113.92

SUMMARY OF TOTAL ADMISSIONS.

Per centage of cases recovered	33.04	16.43	28.08
do died	24.04	19.17	22.80
do remaining	41.06	64.38	48.53

No. 3

PREVIOUS residence of all Patients admitted since the Asylum was opened.

—	Males.	Females.	Total.
Algoma Distr	1	1	2
Counties.			
Brant	6	4	10
Cruce	3	1	4
Earlton	27	17	44
Elgin	2	1	3
Essex.....	2	1	3
Grontenac	41	26	67
Hrey.....	6	3	9
Haldimand	6	4	10
Halton	1	0	1
Hastings	23	8	31
Kuron.....	5	4	9
Lent.....	2	0	2
Lambton	11	2	13
Lanark.....	19	13	32
Leeds and Grenville.....	16	5	21
Lennox and Addington.....	8	4	12
Lincoln	9	2	11
Middlesex.....	7	3	10
Norfolk.....	6	3	9
Carried forward.....	201	102	303

—	Males.	Females.	Total.
Brought forward.....	201	102	303
Northumberland and Durham..	9	11	20
Ontario	12	8	20
Oxford	14	2	16
Peel.....	7	1	8
Perth.....	7	7	14
Peterborough	6	4	10
Prescott and Russell.....	3	4	7
Prince Edward.....	6	2	8
Renfrew.....	6	5	11
Simcoe	6	3	9
Stormont, Dundas and Glengarry	22	10	32
Victoria	3	5	8
Waterloo	10	4	14
Welland.....	6	2	8
Wellington	2	3	5
Wentworth	11	3	14
York	24	17	41
Provincial Penitentiary.....	122	9	131
Toronto Asylum	17	12	29
Malden Asylum.....	0	5	5
Penetanguishene Reformatory .	1	0	1
Military.....	5	0	5
Total.....	500	219	719

No. 4.

PREVIOUS residence of all Patients in the Asylum on 31st December, 1871.

—	Males.	Females.	Total.
Counties.			
Brant	3	4	7
Bruce	3	1	4
Carlton.....	10	12	22
Elgin.....	1	1	2
Essex.....	2	1	3
Frontenac	14	14	28
Grey	2	3	5
Haldimand	3	0	3
Halton	1	0	1
Hastings	9	6	15
Huron	2	2	4
Kent	2	0	2
Lambton	4	2	6
Lanark	6	6	12
Leeds and Grenville.....	5	2	7
Lennox and Addington.....	5	4	9
Lincoln.....	4	2	6
Middlesex	5	2	7
Norfolk.....	4	0	4
Northumberland and Durhum..	1	10	11
Carried forward.....	86	72	158

—	Males.	Females.	Total.
Brought forward.....	86	72	158
Ontario	7	5	12
Oxford.....	6	0	6
Peel.....	4	1	5
Perth.....	0	5	5
Peterborough	3	1	4
Prescott and Russell	1	2	3
Prince Edward	3	2	5
Renfrew.....	5	3	8
Simcoe	2	3	5
Stormont, Dundas and Glengarry	12	8	20
Victoria.....	2	2	4
Waterloo	5	2	7
Welland.....	1	2	3
Wellington	1	2	3
Wentworth	5	3	8
York.....	19	14	33
Provincial Penitentiary.....	41	3	44
Toronto Asylum	4	6	10
Malden Asylum	0	5	5
Penetanguishene Reformatory..	1	0	1
Total.....	208	141	349

No. 5.

SHEWING the number of Patients in the Asylum on the 31st day of December, 1871, whose maintenance is charged to the Province of Ontario, and their previous place of abode.

—		—	
		Brought forward	158
County Brant.....	7	County Ontario.....	12
do Bruce	4	do Oxford.....	6
do Carlton	22	do Peel	5
do Elgin	2	do Perth.....	5
do Essex.....	3	do Peterborough.....	4
do Frontenac.....	28	do Prescott and Russell.....	3
do Grey	5	do Prince Edward.....	5
do Haldimand	3	do Renfrew	8
do Halton.....	1	do Simcoe.....	5
do Hastings.....	15	do Stormont, Dundas and Glengarry .	20
do Huron.....	4	do Victoria	4
do Kent	2	do Waterloo.....	7
do Lambton	6	do Welland	3
do Lanark	12	do Wellington.....	3
do Leeds and Grenville	7	do Wentworth	8
do Lennox and Addington	9	do York	33
do Lincoln.....	6	Penitentiary.....	12
do Middlesex.....	7	Toronto Asylum	10
do Norfolk.....	4	Malden Asylum	5
do Northumberland and Durham.....	11	Penetanguishene Reformatory	1
Carried forward.....	158		317

No. 6.

Form of Disease in those Admitted, Recovered, Died and Remaining.

Form of Insanity.	During 1871.						From 25th June 1855, to 31st December, 1871.						Eloped, Males.	Remaining 31st Dec. 1871.		
	Admitted.		Recovered		Died.		Admitted.		Recovered		Died.					
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	—	M.	F.	Total.
Acute Mania.....	5	12	8	3	3	5	184	77	75	20	33	17	1	75	40	115
Chronic ,, ...	8	5	5	....	6	2	111	69	23	6	43	17	1	44	46	90
Epileptic ,, ...	1	1	.....	....	...	...	36	10	.....	....	16	3	....	20	7	27
Puerperal ,, ...	.....	....	.....	1	...	...	.....	3	.....	3	...	...	....	....	....	....
Recurrent ,, ...	2	9	4	....	...	...	80	25	35	3	9	1	....	36	21	57
Melancholia.....	2	3	1	....	1	1	53	22	27	2	10	2	1	15	18	33
Dementia	2	3	.....	....	...	...	20	12	4	2	3	2	....	13	8	21
Paresis	....	....	.....	....	...	...	8	....	...	....	8	...	....	....	....	....
Idiots.	1	1	.....	....	...	...	4	1	.....	....	...	...	...	4	1	5
Monomania	.....	....	.....	....	...	...	4	....	3	....	...	...	....	1	....	1
Totals	21	34	18	4	10	8	500	219	167	36	122	42	3	208	141	349

Complications in those Admitted.

	Male.	Female.
Epileptic	35	9
Paralytic	10	2
Idiotic	2	2
Suicidal	37	22
Homicidal	81	27
Periodical	78	16
Hereditary	39	11
Totals	282	89

Of the above Homicidal Cases twelve of the men actually committed murder, and three of the men and one of the women committed manslaughter.

No. 7.

OPERATIONS of the Asylum, year by year, from 25th June, 1855, to 31st December, 1871, with Average and Per Centage of Recoveries and Deaths.

Year.	Admitted.			Discharged.												Remaining, 31st December, in each year.			Average Number of Residents.			Per Centage Recoveries on Admissions.			Per Centage of Deaths on average number of Residents.		
				Recovered.			Improved.			Stationary.			Dead.														
	M.		T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1855	20	0	20	....	....	....	....	....	....	....	....	....	....	....	....	20	0	20	.....	.....	.....	.....	.....	.....	.....	.....	.....
1856	5	0	5	1	0	1	....	....	....	....	....	....	....	....	....	24	0	24	.....	.....	.....	20·00	.....	20·00	.....	.....	.....
1857	15	15	30	2	0	2	3	0	3	....	....	....	....	....	....	34	15	49	24·83	8·20	33·04	13·33	.....	13·33	.....	.....	.....
1858	21	10	31	1	2	3	1	2	3	1	0	1	3	0	3	48	21	69	40·54	18·73	59·28	5·00	27·27	12·90	17·42	.....	5·09
1859	26	6	32	5	2	7	3	1	4	....	....	....	7	0	7	59	24	83	38·57	15·93	54·53	19·23	33·33	21·87	18·31	.....	14·77
1860	25	1	26	7	0	7	5	0	5	1	0	1	8	0	8	63	25	88	62·38	24·93	87·33	29·16	.....	26·92	12·90	.....	9·18
1861	23	2	25	10	0	10	4	1	5	....	....	....	8	3	11	64	23	87	61·80	23·41	85·21	39·13	.....	36·00	14·75	8·69	12·94
1862	15	1	16	5	0	5	2	0	2	2	0	2	6	1	7	64	23	87	64·03	23·17	87·20	33·33	.....	31·25	9·32	4·26	8·04
1863	20	4	24	8	0	8	1	0	1	....	....	....	3	1	4	72	26	98	65·60	23·83	89·43	40·00	.....	33·33	4·58	4·21	4·49
1864	21	3	24	13	2	15	1	0	1	....	....	....	9	2	11	70	25	95	69·32	25·74	95·06	63·33	.....	58·33	13·04	7·77	11·57
1865	32	3	35	6	2	8	3	0	3	....	....	....	2	1	3	91	25	116	79·27	24·75	104·02	18·75	66·66	22·83	2·53	4·04	2·88
1866	27	8	35	9	1	10	1	1	2	0	1	1	6	1	7	102	29	131	97·53	27·42	124·95	37·03	12·05	28·56	6·18	3·07	5·64
1867	32	0	32	10	0	10	5	0	5	....	....	....	9	0	9	110	29	139	106·47	29·00	135·47	29·03	.....	29·03	8·49	.....	8·13
1868	50	39	89	7	1	8	6	0	6	1	0	1	13	2	15	133	65	198	132·23	47·81	180·04	12·00	5·01	8·97	11·36	2·08	8·88
1869	76	55	131	6	9	15	....	....	....	....	....	....	16	10	26	188	101	289	156·95	88·47	245·42	8·10	15·51	11·36	10·06	11·35	10·62
1870	71	38	109	22	6	28	....	....	....	....	....	....	22	13	35	215	120	335	203·31	115·96	319·27	30·98	15·78	25·68	10·83	11·30	10·98
1871	21	34	55	18	4	22	....	....	....	0	1	1	10	8	18	208	141	349	212·99	127·46	340·45	89·04	11·76	40·00	4·69	6·14	5·28
	500	219	719	130	29	159	35	5	40	5	2	7	122	42	164												

No. 8.

Obituary Table for the year 1871.

Number of deaths.	Register number.	Sex.	Civil State.	Age.	Date of Admission.	Date of Death.	Form of Insanity.	Duration of Insanity.	Assigned cause of Insanity.	Proximate cause of Death.
1	90	Female..	Single....	32	Feb. 8, 1859	Jan. 27, 1871	Melancholia	Twelve years	Irregular habits...	Phthisis.
2	641	Male.....	Single....	41	Aug. 16, 1870	Feb. 10, do	Chronic mania..	Seven years	Not given	Exhaustion.
3	590	Male.....	Single....	57	May 13, 1870	March 2, do	do ..	Thirty-one years.....	Hereditary	Paresis.
4	665	Male.....	Single....	30	Jan. 6, 1871	do 18, do	Acute mania....	Fifteen months	do	Exhaustion.
5	485	Male.....	Single....	34	Aug. 4, 1869	do 18, do	Chronic mania..	Four years	Masturbation....	Paresis.
6	482	Female...	Single....	45	July 30, 1869	April 11, do	Acute mania....	Two years.....	Not given	Exhaustion.
7	667	Male.....	Single....	25	Jan. 14, 1871	do 24, do	Epileptic mania.	Eighteen years	Epilepsy	Epilepsy.
8	604	Male.....	Married..	48	June 28, 1870	do 29, do	Acute mania	Twelve months	Not given	Paralysis.
9	538	Female...	Single....	35	Nov. 22, 1869	May 28, do	Chronic mania..	Four years	do	Phthisis.
10	335	Male.....	Single....	17	Jan. 8, 1868	do 29, do	Epileptic mania.	Several years.....	Epilepsy	Epilepsy.
11	680	Male.....	Married..	57	April 18, 1871	June 11, do	Acute mania....	Three months	Loss of property ...	Erysipelas.
12	45	Female...	Single....	45	May 10, 1857	do 15, do	Dementia	Twenty years.....	Not given	Phthisis.
13	432	Female...	Widowed.	65	Jan. 15, 1869	July 27, do	Acute mania....	4 years, 6 months....	do	Exhaustion.
14	294	Female...	Single....	24	July 23, 1866	Oct. 16, do	do	5 years, 8 months....	do	Phthisis.
15	445	Female...	Single....	21	March 18, 1869	do 17, do	do	3 years, 6 months....	do	Exhaustion.
16	637	Male.....	Single....	31	Aug. 11, 1870	do 17, do	Recurrent mania	2 years, 5 months....	Masturbation....	Phthisis.
17	446	Male.....	Married..	65	March 19, 1869	Nov. 16, do	Chronic mania..	12 years, 6 months...	Not given	Ascites.
18	391	Female...	Married..	33	Nov. 12, 1868	do 21, do	do ..	Five years.....	do	Phthisis.

No. 9.

CAUSES of Deaths since opening of the Asylum.

	Male.	Female.	Total.
Cerebral Diseases.			
Apoplexy and Paralysis	25	2	27
Epilepsy	14	.....	14
Paresis	8	.....	8
Exhaustion from Acute Mania	4	4	8
Thoracic Diseases.			
Inflammation of the Lungs	2	.....	2
Pulmonary Consumption	35	22	57
Disease of Heart	4	.....	4
Abdominal Diseases.			
Inflammation of the Kidneys and Bladder	1	.....	1
Ascites	6	3	9
Fever	3	1	4
Dysentery	6	7	13
Erysipelas	3	.....	3
Strangulated Hernia	1	.....	1
Suicide	1	.....	1
General Debility of Old Age	9	3	12
	122	42	164

No. 10.

SHEWS the expenditure for the year 1871, and the average annual cost of each patient.

		$ cts.	$ cts.
Food	Beef and mutton	4,353 04	
	Flour	3,970 00	
	Groceries	5,605 79	
	Vegetables	1,059 54	
	Sundries	243 76	
			15,232 13
Salaries and wages			11,773 33
Material for clothing			1,184 34
Fuel and lights			8,557 00
Medicines			320 00
Furniture			281 60
Laundry			212 63
Fodder			400 00
Repairs			904 13
Capital account			293 42
Incidentals			547 00
Difference of stock between 31st December, 1870, and 31st December, 1871			814 20
			$40,519 78
Total amount charged against 1871			$40,519 78
Deductions:—		$ cts.	
Repairs		904 13	
Fodder		400 00	
Capital account		293 42	
$8 per month each, charged 18 keepers for board		1,728 00	
			3,325 55
			$37,194 23
Average cost for each patient for the year			$109 39

No. 11.

CRIMINAL LUNATICS sent from the Provincial Penitentiary to the Toronto Asylum previous to opening Rockwood Asylum.

No.	—	Sex.	Crime.	When sent.	Results as far as known.
1	J. C.	M.	Felony	29th June, 1846	
2	N. B.	M.	Larceny	12th August, 1846	
3	M. S.	M.	Rape	13th November, 1847	Pardoned and removed.
4	J. B.	M.	,,	2nd December, 1851	Transferred to Rockwood and died there.
5	J. J.	M.	Murder	,, ,,	Now in Rockwood.
6	C. G.	M.	,,	,, ,,	Returned to Penitentiary.
7	W. W.	M.	Felony	,, ,,	Died 19th May, 1852.
8	W. S.	M.	Murder	,, ,,	Now in Penitentiary, sent from Rockwood.
9	J. S.	M.	Horse stealing	,, ,,	Transferred to Rockwood, and died there.
10	R. B.	F.	Larceny	,, ,,	,, ,, ,,
11	G. M.	F.	Murder	2nd May, 1852	Now in Penitentiary.
12	T. P.	M.	Obtaining goods falsely	4th ,,	
13	B. M.	F.	Larceny	,, ,,	Pardoned, 12th August, 1853.
14	J. Y.	M.	Forgery	16th June, 1852	
15	G. F.	M.	Larceny	11th October, 1852	Returned to Penitentiary.
16	A. L.	F.	Manslaughter	,, ,,	,, ,,
17	J. A. K.	M.	Larceny	13th May, 1853	
18	W. S.	M.	,,	,, ,,	
19	W. R.	M.	Cattle stealing	6th July, 1853	Returned to Penitentiary.
20	T. T.	M.	Murder	,, ,,	Now in Rockwood.
21	S. D.	F.	Larceny	16th September, 1856	,, ,,

No. 12.

A TABLE shewing the number of Criminal Lunatics that were received in Rockwood Asylum from the Provincial Penitentiary, from 25th June, 1855, to 31st December, 1871, and how they were disposed of.

Year.	Admitted.			Discharged.			Returned to Penitentiary.			Died.			Remaining, 31st December, 1871.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
1855	9	....	9	2	....	2	1	....	1	4	....	4	2	....	2
1856	1	....	1	....	....	.....	....	....	....	....	....	.....	1	....	1
1857	5	1	6	3	1	4	1	....	1	....	....	.....	1	....	1
1858	6	1	7	2	1	3	1	....	1	1	....	1	2	....	2
1859	10	1	11	3	....	3	2	....	2	2	1	3	3	....	3
1860	15	....	15	8	....	8	6	....	6	....	....	.....	1	....	1
1861	7	1	8	1	1	2	3	....	3	1	....	1	2	....	2
1862	7	....	7	3	....	3	2	....	2	1	....	1	1	....	1
1863	9	....	9	6	....	6	2	....	2	1	....	1	....	....	.....
1864	10	1	11	2	1	3	5	....	5	....	....	.....	3	....	3
1865	4	....	4	1	....	1	1	...	1	1	....	1	1	....	1
1866	5	....	5	2	....	2	2	....	2	....	....	.....	1	....	1
1867	6	....	6	1	....	1	2	....	2	1	....	1	2	....	2
1868	2	....	2	....	....	.....	1	....	1	....	....	.....	1	....	1
1869	7	1	8	....	....	.....	1	....	1	1	1	2	5	....	5
1870	9	2	11	....	....	.....	2	....	2	....	....	.....	7	2	9
1871	10	1	11	....	....	.....	2	....	2	....	....	.....	8	1	9
Totals	122	9	131	34	4	38	34	....	34	13	2	15	41	3	44

No. 13.

LIST of Convicts whose Maintenance has been charged to the Province of Ontario, since the expiration of their sentences.

Asylum number.	Sex.	Crime.	Sentence expired.
No. 16.....	Male	Larceny	23rd July, 1859.
,, 26.....	,, ...	,, ...	14th April, 1858.
,, 61.....	,, ...	,, ...	19th February, 1860.
,. 161.....	,, ...	,, ...	1st July, 1864.
,, 170.....	,, ...	Arson	14th November, 1866.
,, 90.....	Female	Larceny	15th December, 1860.
,, 116.....	Male	Murder.....	25th August, 1864.
,, 442.....	,, ...	Misdemeanor	15th March, 1870.
,, 309 ....,...	,, ...	Assault with intent.....	6th May, 1870.
,, 323....	,, ...	Obstructing railway.....	11th September, 1870.
,, 297.....	,, ...	Arson	29th April, 1870.
,, 597.....	Female.....	Larceny	11th September, 1871.
,. 189.....	Male.....	Highway robbery	14th October, 1867.
,, 214.....	,, ...	Arson	18th October, 1871.
,, 650.....	Female.....	Larceny.....	12th October, 1871.

No. 14.

A RETURN shewing the number of Criminal Lunatics received into Kingston Penitentiary from the Province of Quebec, and thence sent to Rockwood Asylum, whose Maintenance should be charged to the Province of Quebec, since the termination of their respective sentences.

Asylum No.		Expiration of Sentence.	Time charged.			Amount due.	
			Years.	Months.	Days.	Rate.	$ cts.
63	F. G...	26th June, 1860.....	11	6	5	$143	1,646 45
144	L. B...	6th March, 1866.....	5	9	25	,,	832 00
213	B. A...	16th December, 1866	5	0	15	,,	720 85
184 / 224	J. D...	26th October, 1866.....	5	2	5	,,	740 77
303	J. DeL.	23rd November, 1870.....	1	1	8	,,	158 04
444	G. C...	10th April, 1869.....	2	8	21	,,	389 53
							$4,487 64

The above rate is a similar amount to that paid by the Ontario Government for their Patients; one hundred and forty-three dollars per annum.

No. 15.

Crimes of which Convict Lunatics had been found guilty.

Arson	10	Murder	12
Attempt to murder	3	Manslaughter	4
Attempt to rape	5	Misdemeanour	1
Assault to kill	9	Obtaining goods falsely	2
Assault and robbery	1	,, money falsely	1
Burglary	6	Obstructing railways	2
Burglary and horse stealing	1	Prison breaking and horse stealing	1
Cattle stealing	2	Robbery	2
,, wounding	1	Rape	10
Forgery	3	Receiving stolen goods	1
Felony	4	Robbing and wounding	1
Horse stealing	4	Sheep stealing	1
Highway Robbery	1	Stealing a horse and buggy	1
Larceny	48	Common assault	2
,, in church	2	Total	141

No. 16.

Convicts who were declared to be Insane in the Provincial Penitentiary, and were thence sent to Rockwood Asylum; giving the yearly population of the Penitentiary, and the per centage of the whole declared to be Insane.

Year.	Population of Penitentiary.	Convicts sent to Rockwood Asylum.	Per centage of Convicts sent to Asylum.	Re-admission to this Asylum.	Convicts who had been in Toronto Asylum.	Known to have been insane previous to conviction.
1855	707	9	1,270	.....	4	.....
1856	832	1	0,120	.....	1	.....
1857	907	6	0,661	1	.....	.....
1858	1,038	7	0,674	1	.....	.....
1859	1,034	11	1,063	.....	.....	.....
1860	1,039	15	1,443	4	.....	1
1861	1,012	8	0,790	1	.....	.....
1862	1,007	7	0,695	.....	.....	1
1863	1,070	9	0,841	1	.....	.....
1864	993	11	1,107	1	.....	.....
1865	1,005	4	0,398	.....	.....	.....
1866	1,044	5	0,479	2	.....	1
1867	1,113	6	0,539	1	.....	1
1868	1,129	2	0,177	.....	.....	1
1869	1,004	8	0,796	.....	.....	.....
1870	909	11	1,210	3	.....	2
1871	912	11	1,206	.....	.....	5
		131		15	5	12

Total admissions from 1855 to 1871, both years included		131
Deduct re-admissions	15	
,, Convicts known to have been insane previously	12	
,, Convicts who had been in Toronto Asylum	5	
		32
Convicts who became insane in the Penitentiary		99
Per centage of Convicts who became insane in 15 years and 6 months		0·531

No. 17

SHEWS the per centage of convicts who became insane in the Provincial Penitentiary, from the 1st June, 1835, to the 31st December, 1871. The calculation based on the admissions, and not on the population.

Total number of convicts admitted to the Provincial Penitentiary from 1835 to 1871 inclusive....		7,850
Deduct the re-commitments for same period.....		574
Actual number of convicts to form basis of calculation.....		7,276
Total number of convict lunatics sent to Rockwood Asylum from Provincial Penitentiary, from 25th June, 1855, to 31st December, 1871		131
Deduct re-admissions to Rockwood Asylum	15	
,, convicts who were insane before conviction	12	
,, convicts who had been in Toronto Asylum previously	5	
		32
		99
Convict lunatics sent to Toronto Asylum, table No. 11		21
Total number of convicts who became insane in the Penitentiary		120
Per centage of convicts who became insane in the Penitentiary, based on the admissions.....		1.649

It will be seen above that a little over one-and-a-half per cent of all convicts sent to the Penitentiary since it was established, became insane.

No. 18.

Officers, Attendants, and others employed.

Position.	Salaries and Wages. Yearly.	Salaries and Wages. Monthly.	Deductions.
	$ cts.	$ cts.	
Medical Superintendent	2,000 00	160 00	4 per cent. for Superannuation Fund.
Accountant	875 00	70 00	,, ,, ,,
Steward	500 00	41 66	With board and lodging.
Store Keeper.....	500 00	41 66	Without board.
Chief Engineer.....	700 00	58 33	,,
2nd Engineer	400 00	33 33	,,
Gardener and Gate Keeper.....	400 00	33 33	With house free.
Baker	400 00	33 33	Without board.
Cook	360 00	22 00	$8 per month for board.
1 Carpenter, doing duty as keeper also.....	400 00	25 33	,, ,,
1 Porter ,, ,, ...	400 00	25 33	,, ,,
1 Keeper.....	400 00	25 33	,, ,,
14 Keepers, at $360 per year each	5,040 00	308 00	,, ,, each.
1 Night Watch.....	320 00	26 66	Without board.
Matron.....	300 00	25 00	With board and lodging.
2 Laundry Maids, at $120 each.....	240 00	20 00	,, ,,
7 Nurses, at $120 per year each.....	840 00	70 00	,, ,,

	Male.	Female.	Total.
Average number of Patients	212.99	127.46	340.45

No. 19.

MALES.—EMPLOYMENT of Patients during the year 1871. Number of days and parts of days' Labour.

Sphere of Occupation.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Total.
Carpenters	71	72	78	78	71	75	81	81	75	71	78	78	909
Engine House	93	84	93	90	93	90	93	93	90	93	90	93	1095
Farm	14	32	158	200	296	240	246	100	109	336	290	100	2121
Roads—preparing metal for	187	168	182	182	189	100	90	90	96	....	....	....	1284
Garden and Manure Heap	120	120	94	120	144	120	120	123	100	100	140	100	1401
Jobbing	120	120	120	120	73	94	120	130	64	62	....	....	1023
Stables	54	48	52	60	63	60	62	60	62	60	60	60	701
Tailors' Shop	107	136	108	130	56	58	58	....	....	....	40	76	769
Shoemakers' Shop	....	....	...	24	24	56	54	54	54	56	56	56	434
Painting	17	14	24	22	18	25	8	11	16	10	....	...	165
Quarry	....	....	....	....	....	120	124	116	118	122	....	....	600
Kitchen	108	96	104	104	108	100	108	108	108	108	120	124	1296
Laundry	135	120	130	125	135	135	135	125	125	135	130	130	1560
Masons and Assistants	....	....	....	91	135	123	104	116	135	145	74	....	923
Whitewashers	....	22	..	...	16	....	....	20	....	....	....	10	68
Wood Yard	71	72	78	78	54	50	54	71	75	71	80	104	858
Total	1097	1104	1221	1424	1475	1446	1457	1298	1227	1369	1158	931	15207

ATTENDANTS.

Accompanying labour	90	174	183	282	227	215	228	209	209	216	194	192	2419

FEMALE PATIENTS.

Laundry	73	73	74	75	75	74	75	75	74	73	73	75	889
Making in Sewing Room	218	218	219	222	218	219	217	218	219	217	218	217	2620
Repairing in Sewing Room	151	152	150	152	153	150	148	156	158	140	160	158	1828
Total	442	443	443	449	446	443	440	449	451	430	451	450	5337

No. 20.
RETURN of Works done in 1871.

DESCRIPTION.		Height.	Lineal.
Carpenters.			
Topping stone wall with slat-rail fence		3· 8 +	709
Building board fence enclosure		7· 0 +	82
Remodelling and repairing sheds			
Making 5 large gates			
Sundries repairs			
Painters.			
General work	square feet		33,260
Masons.			
Building stone wall enclosure		4· 0 +	805
Coping do built 1870			626
Stone gate piers, three sets		9· 0	
Sundries, repairs			
Quarry.			
From under ¾ acre of rocky surface land, making same arable; stone building material. Cubic yds.			3,700
Levelling and grading yard			
Macadamising Avenues and roads			

No. 21.
RETURN of Works done in 1871.

DESCRIPTION.		Made.	Repaired.
Tailors' Shop.			
Mens' coats, summer tweed		51	
Do. winter cloth		46	
Trowsers, summer tweed		82	
Do. winter cloth		46	
Vests do.		50	47
Jackets			24
Shoemakers' Shop.			
Canvas shoes	pair	56	
Boots, Goburg	do	9	
Shoes	do		100
Boots	do		76
Repairs to Harness, &c			

No. 22.

FARM and Garden Produce.

Description.	Quantities.			Value.
				$ cts.
Potatoes	679 bushels	@	$0 49	332 71
Parsnips	50 ,,	,,	0 50	25 00
Tomatoes	25 ,,	,,	1 00	25 00
Onions	18 ,,	,,	1 50	27 00
Carrots	100 ,,	,,	0 40	40 00
Beets	56 ,,	,,	0 45	25 20
Beans	30 ,,	,,	1 00	30 00
Apples	10 ,,	,,	0 60	6 00
Peas in pod	10 ,,	,,	0 20	2 00
Cabbage	1,500 heads	,,	0 10	150 00
Lettuce	84 baskets	,,	0 20	16 80
Currants	96 quarts	,,	0 07	6 72
Pork fed on premises	2,385 lbs	,,	6 00	143 10
Live Hogs, stock				132 00
				$961 53

No. 23.

WORK performed by Female Patients.

Articles made.	No.	Articles repaired.	No.
Aprons, females	171	Bed ticks	167
,, cooks	12	Bunk ticks	14
Bedticks	18	Blankets	14
Chemise	48	Counterpanes	53
Caps	51	Drawers, pairs	165
Drawers, pairs	3	Jackets	24
Dresses, cotton	121	Pillow ticks	88
,, stuff	78	,, slips	63
Jackets	59	Shirts, flannel	1,098
Night gowns	7	,, cotton	407
Petticoats	92	Socks, pairs	1,788
Pillow slips	198	Sheets	64
Pillow ticks	72	Socks, marked	282
Shirts, white cotton	6	Stockings, footed	87
,, fronts and collars	8		
Socks, wool, pairs	344		
,, cotton ,,	2		
Stockings, cotton, pairs	139		
Smocks, blouses	2		
Towels	24		

ST. JOHN PENITENTIARY.

WARDEN'S REPORT,

January 16th, 1872.

To the Chairman and Directors of Penitentiaries :—

GENTLEMEN,—There was a very small stock of manufactured articles on hand at the close of 1870 ;—the number of male prisoners then only sixty, soon went down to a daily average of fifty during the year 1871, which closed as it began, with sixty males all told. With this small number of prisoners, not one half the demand for prison wares could be supplied ; and, in consequence, importation commenced early in the season and the market was soon overstocked with imported to the exclusion of prison articles, when ready. The sale of brooms particularly, almost ceased for some time, and is still very dull, with a large stock on hand ; an article too, that does not improve with age.

Over one half the small daily average of prisoners, given above, were of the vagrant class ; a well understood detriment to making the best show of productiveness from the labour of a given number of prisoners so composed. There were 193 commitments, male and female, to the prison in 1871, and 150 of this number are for terms under three months. This should account in some measure for what may appear an insufficient show of manufactures for the labour spent in their production.

Table No. 8, shows a profit on manufactures of $6,196 33. This gives over 62½cts. per day for the labour employed thereon. In Table No. 3. the labour charged "maintenance" would, applied to manufacturers, produce the same or a better result per day for the whole number. It is only fair therefore to set down the total earnings by labour, for the year, at $8,616 59. This is for an average of fifty prisoners per day, for the year, as aforesaid ; one half of whom are of the class above described, and certainly not the sort to contribute most towards paying prison expenses. But, the Warden feels confident that he can do better even with these, if allowed the chance in the way he has prescribed.

The general health of the inmates during the year has been very good, there was one death near the close—Patrick Haggerty, between fifty and sixty years of age, admitted on the 26th October, died on the 26th December,—a poor emaciated, sallow, bloodless, inebriate, with heart disease, and with hardly breath enough on admission, it would seem, to last for twenty four hours.

There was also one escape within the year ; with the circumstances of which the Directors are acquainted—Patrick Slavin, on the 18th of September, after nearly fourteen years imprisonment.

A daring *attempt* was made by convict James McCarron, on the 1st day of August, and cleverly frustrated by a shot from the nearest guard (Godsoe). The Convict in the act of going over the picket fence received two "buck shots," one in the left arm, the other in the right side of the back. These effectually checked his progress at the time, and remain with him yet ; but he is quite well, and neither complains of, nor appears to suffer any inconvenience, from the lodgement, in his person, of these small missives.

There is little to complain of in the conduct of prisoners during the year ; and punishment—anything deserving the name, but rarely inflicted.

Respectfully submitted,

by, Gentlemen, Your obedient servant,

JOHN QUINTON,

Warden.

T. J. O'Neill Esq.,

Chairman, Director.

Table No. 1.

Prisoners, Convict and others, in St. John Penitentiary, on the 1st of January, 1871 Admitted, discharged; and remaining at the close of the year :—

Males, 60	Females, 19	79
Admitted :—		
Males, 108.....	Females, 85	193
		—— 272
Discharged :—		
Males, by expiration of sentence		103
„ Escaped		1
„ Died		1
Females, by expiration of sentence		93
		—— 198
Remaining 31st December, 1871 :—		——
Males, 60 .....Females, 14		74

Table No. 2.

Daily average of prisoners of all classes :—

Males, 50	Females, 21	71

Table No. 3.

Employment of male prisoners, all classes during 1871 :—

9923 days on Account of *Manufactures*; 3895 days *Maintenance.*

Table No. 4.

Convicts,—Sentence two years and upwards, in St. John Penitentiary, 1st January, 1871 :—Admitted, and discharged; and remaining at its close :—

Males, 32	Females, 3	35
Admitted :—		
Males, 10	Females, 1	11
		—— 46
Discharged :—		
Males, by expiration of sentence		12
„ „ Pardon		3
„ „ Escape		1
		—— 16
Remaining, 31st December, 1871 :—		——
Males, 26	Females, 4	30

Table No. 5.

Daily average of Convicts during 1871 :—

Males, 24	Females, $3\frac{3}{5}$	$27\frac{3}{5}$

Table No. 6.

A Nominal list of Convicts in Prison on the 1st of January, 1872; ages, sentence, and expiration of same. In reference to tables No. 4 and 5.

Name.	Age.	Sentence.	Sentence expires.
Bean, Johnston	57 years	Life	With his natural life.
Kay, James	65 ,,	,,	,, ,,
Hall, Peter	32 ,,	7 years	May 16th, 1873.
McCormick, John	39 ,,	8 ,,	September 27th, 1875.
Ross, Malcolm A	22 ,,	3 ,,	May 27th, 1873.
McPherson, James	53 ,,	2 ,,	June 26th, 1872.
Coyen, Lawrence	33 ,,	2 ,,	,, ,,
Douglas, Robert B	40 ,,	3 ,,	July 27th, 1873.
Finney, Joseph	30 ,,	2 ,,	,, 28th, 1872.
Anderson, George	26 ,,	2 ,,	August 15th, 1872.
Dougherty, Thomas	67 ,,	2 ,,	September 15th, 1872.
McIntosh, Angus	31 ,,	2 ,,	,, 17th, 1872.
McCarron, James	38 ,,	27 ,,	October 31st, 1897.
Cameron, John	52 ,,	2 ,,	,, 24th, 1872.
Davis, Robt. B	43 ,,	12 ,,	,, 31st, 1882.
Driscoll, John	21 ,,	12 ,,	,, 31st, 1882.
McCredy, William	19 ,,	4 ,,	April 27th, 1875.
Gillespie, Joseph	20 ,,	3 ,,	,, 27th, 1874.
McCarty, Robert	22 ,,	3 ,,	,, 27th, 1874.
Flemming, Nicholas	25 ,,	4 ,,	May 30th, 1875.
Le Gassie, Marcelle	30 ,,	2 ,,	July 18th, 1873.
McCallum, James	20 ,,	3 ,,	,, 19th, 1874.
*Blake, James W	18 ,,	2 ,,	,, 28th, 1873.
*Addison, Albert	21 ,,	3 ,,	August 21st, 1874.
Gribbens, John	21 ,,	6 ,,	,, 21st, 1877.
Smith, Samuel A	19 ,,	3 ,,	October 30th, 1874.
Hall, Sarah	23 ,,	2 ,,	August 15th, 1872.
*Treadwell, Caroline	32 ,,	2 ,,	,, 10th, 1872.
Cook, Annie	22 ,,	2 ,,	,, 21st, 1872.
Burk, Jane	31 ,,	2 ,,	April 27th, 1873.

* With this mark are colored persons.

N.B.—The two "life" prisoners have been recommended for executive clemency.

Table No. 7.

Convicts—In reference to Tables 4, 5, and 6—place of birth, religious profession, and education.

Place of Birth.

England, 1; Ireland, 4; Scotland, 2; Dominion of Canada, 22; United States, 1..... 30

Religious Profession.

Protestant 17; Catholic 13..... 30

Education

Read and Write, 19; Read only, 7; Neither, 4..... 30

Table No. 8.

Statement of Manufactures, St. John Penitentiary, from 1st January to 31st December, 1871.

	$ cts.	$ cts.
Inventory of stock on hand 31st December, 1871, at the Penitentiary and warehouse	13,082 76	
Sales of manufactures, from 1st of January to 31st December, 1871	17,454 37	30,537 13
Expended for material for manufactures from January 1st to December 31st, 1871	18,909 07	
Inventory of stock on hand at the Penitentiary and warehouse, December 31st, 1870	5,431 73	
Balance in favor of manufactures, to 31st December, 1871	6,196 33	
	$30,537 13	$30,537 13

Particulars of Expenditure for Manufactures, from January 1st, to December 31st, 1871.

	$ cts.
For Lath-yarn	19 04
Tacks and twine	548 70
Paint and oil	1,111 21
Lumber	4,208 16
Broom-corn	10,167 32
Machinery oil and belting	93 76
Machinery and repairs	174 71
Hardware for manufactures	44 77
Wire and rivets	179 52
Hoop-iron	503 00
Brimstone	28 68
Proportion of salaries	1,050 00
Fuel—wood, 166 cords	780 20
	$18,909 07

Table No. 9.

PARTICULARS of Inventory.—Stock for manufacturing, and manufactured articles on hand, at the Penitentiary and warehouse, on the 31st December, 1871.

	$ cts.
Raw material :—	
Lumber—pine and spruce, at cost	2,312 39
41 cwt., $\frac{5}{8}$ hoop-iron—$4.80	196 80
19 cwt., $\frac{3}{4}$,, ,,	91 20
10 cwt., 1-in. ,, $4.00	40 00
227 lbs. hoop rivets—12½ cts	28 37
58 m. 14-oz. tacks—9 cts	5 22
575 lbs. dry white lead—8½ cts	48 87
51 galls. paint oil—85 cts	43 35
112 galls. varnish—85 cts	95 20
46 galls. turpentine—90 cts	41 40
102 lbs. paint drier—10 cts	10 20
100 lbs. black paint—8 cts	8 00
117 lbs. whiting—1 ct	1 17
53 lbs. glue—16 cts	8 48
45 gals. machinery oil —50 cts	22 50
1 ream flint paper—$5.00	5 00
55 lbs. lath yarn—16 cts	8 80
2 sides lacing leather—$4.00	8 00
6 lbs. Prussian blue (dry)—80 cts	4 80
400 doz. pail bails (made up)	28 00
4½ bales broom-corn (945 lbs.)—5½ cts	51 97
300 doz. broom handles—18 cts	54 00
583 lbs. broom-wire—16 cts	93 28
14 lbs. Hungarian nails—11 cts	1 54
159 lbs. brimstone—4 cts	6 36
978 lbs. twine—27 cts	264 06
85 tons coal for manufactures—$5.30	450 50
Manufactured articles :—	
99 doz. No. 1 brooms—$3.50	346 50
362 ,, 2 ,, $3.25	1,176 50
474 ,, 3 ,, $3.00	1,422 00
609 tubs, three sizes	323 45
6 doz. pails—$1.90	11 40
At the warehouse :—	
307 doz. brooms	1,003 00
130⅔ ,, pails—$1.90	248 27
123 tubs, five sizes	64 55
Raw material :—393 bales broom-corn (82,866 lbs.)—5½ cts	4,557 63
	$13,082 76

Table No. 10.

MONTHLY sales of manufactures in 1871.

	$ cts.		$ cts.
January	1,122 90	July	1,294 30
February	1,384 55	August	1,153 66
March	2,085 85	September	425 65
April	3,000 70	October	705 20
May	2,916 90	November	655 40
June	2,082 06	December	627 20
			17,454 37

Valuators estimate of the value of buildings, steam engine, machinery &c., &c.—St. John Penitentiary :—

Granite prison (Males)	$61,101 00
Brick building (Female prison)	9,600 00
Workshop and boiler house (brick)	7,448 00
Warden's quarters and Guards' houses (brick)	11,746 00
Steam Engine, running gear, and tools	10,356 00
	$100,251 00

PROTESTANT CHAPLAIN'S REPORT.

St. John, New Brunswick,
January 20th, 1872.

To the Directors of Penitentiaries.

Gentlemen,—Since the date of my last Report, nothing has occurred of such importance as to need special reference.

I have regularly discharged the duties of my office, conducting Divine Worship every Sunday and Wednesday. The Sunday School has been attended to, and also the Day School. Mr. Patchell has done his work well as teacher, and more interest has been taken by the pupils than formerly.

I do not know that our plans are susceptible of much improvement. The men have sufficient opportunities of acquiring religous and secular knowledge, suited to their circumstances. And my earnest endeavour is so to appeal to their consciences and hearts as to convince them that sin is foolish as well as criminal; and that obedience to law, divine and human, is the only sure way to happiness and honor.

I think the general tone of feeling and conduct in this Penitentiary is very much better than it was formerly. There is only one Protestant on the sick list.

I am, gentlemen,
Very respectfully yours,
George Schofield,
Protestant Chaplain St. John Penitentiary.

ROMAN CATHOLIC CHAPLAIN'S REPORT.

St. John, New Brunswick,
March 11th, 1872.

To T. J. O'Neill, Esq.,
Chairman of the Board of Directors.

Sir,—As the law makes it an important part of the duty of Chaplains of Penitentaries to furnish an annual report of the moral and religious condition of the prisoners trusted to their care, I now endeavour to acquit myself of that duty for the year eighteen hundred and seventy-one.

The Roman Catholic Chaplain has, as in the past years, devoted to the Roman Catholic prisoners all the instruction, care and attention which they required; he has had Divine Service in their chapel once every Sunday during the year, and has performed other religious duties during the week, when necessary.

I may here repeat what I said in last year's report as regards the pious deportment of the prisoners, at Divine Worship; that I always observed in them a deep respect for religion and reverence for its ministers. To this there is but one exception, the notorious McCarron, who appears to be incorrigible. He, however, should not be called a Roman Catholic, as he sneers and scoffs at all religion, and denies there is a God, or a future state. This desperate character was recommitted to the Penitentiary over a year ago, having been found guilty of robberies and sacrilege. It is not long since he finished his term of ten years in the Penitentiary for manslaughter. He now thinks every hand is against him, and his hand, therefore, is against every man.

The number of Roman Catholic prisoners admitted into the St. John Penitentiary in the year 1871, was one hundred and thirty-eight, seventy males and sixty-eight females. The average number during that year was thirty-three males and twelve females. This number may appear large, but it will be otherwise when it is known that the establishment is at the same time a jail and a penitentiary, and that persons are sent there for the most trevial offences, as well as for henious crimes. Several of the prisoners were very young boys, and for such it was intended to serve as a reformatory. The number of recommitments during the year was fifty-six:—males, twenty-six; females, thirty.

Seventy-six were natives of Ireland, sixty-two were natives of the Dominion of Canada,

One hundred and fifteen were committed for drunkenness, and of these, sixty-six were females, and forty-nine were males. Fifteen for stealing :—males, thirteen ; females, two. One for forgery, one for robbery, and two for assault.

Forty-four could read, and twenty-three could read and write. Of those who could read, all knew their prayers, and had a good knowledge of the catechism. The others who could not read, many of them knew some prayers but had little knowledge of the christian doctrine. These unfortunate prisoners generally deplored their loss of liberty and loss of character ; yet how strange it is that so many of them so soon relapse into their former disorders, and are recommitted so often. The number of commitments for drunkenness is large, and indeed they generally acknowledge, and that openly, that their other faults have their origin in intemperance.

The books and reading matter are very useful and beneficial, especially on Sundays, when the prisoners have no other occupation. I do not now remember the number of volumes in the collection, but the number is not large, and I would therefore recommend that some more works be added. The prisoners have an hour or more every evening which they might occupy in reading, during the summer months, but in winter, owing to the situation of the lamps being distant from the cells, to many of them reading at night is impossible.

I have not yet introduced singing at Divine Service in the Penitentiary, for the reason that I think I would not succeed. Bad music or singing is no help to devotion, and when we cannot sing well it it is much better to worship God in silence.

I have the honor to be, Sir,

Your obedient servant,

THOMAS CONNOLLY,

Chaplain.

SCHOOLMASTER'S REPORT.

ST. JOHN PENITENTIARY,

January 20th, 1872.

To the Directors of Penitentiaries.

GENTLEMEN,—I beg to submit my annual report relating to the educational department of this institution for the year 1871.

The average daily attendance at school is fifteen, and the branches taught were rudimentary—reading, writing, and arithmetic.

Respectfully submitted.

E. M. PATCHELL,

Chief Keeper, &c.

MATRON'S REPORT.

ST. JOHN PENITENTIARY,

(FEMALE DRPARTMENT,)

January 10th, 1872.

To the Directors, &c., &c.,

GENTLEMEN,—There was, on the 1st day of January, 1871, in this department, nineteen prisoners, eight of whom were convicts, the rest short time prisoners. During the year, eighty-three were admitted, one only of them a convict. The daily average for the year was about nineteen, and the number at the close of the year fourteen, of which four are convicts.

I have had no occasion to punish during the year. Prisoners' conduct generally good and their industry creditable.

The employment during the year as usual—wool dyeing, spinning yarn, and weaving cloth for prison clothing; knitting and sewing, that is, knitting socks and stockings, and mittens, for prison use, and making and mending prison clothing, doing all the prison washing and cooking, and the female prison house home work.

Female prisoners have their share in the religious instruction provided for the institution.

Your obedient servant, &c., &c.,

CATHARINE KEEFFE, Matron.

SURGEON'S REPORT.

ST. JOHN PENITENTIARY,

31st December, 1871.

SIR,—In presenting the annual report of the sanitary condition of the St. John Penitentiary, for the year ending 31st December, 1871, I am happy to say that the year has been one very favorable to the health of the institution. The year has gone round without either endemic or epidemic disease showing itself, and the general character of disease has been of mild and tractable nature. Fever has been of very favorable type. Had a few days at the end of the year passed by, we should have had a year without a death, but just four days before the end of the year, the old man, Rafferty, who had been ill for years before coming to the Penitentiary, with consumption, died; he had been here over six months, and I told him of his position when he first entered. He never did any work, but behaved well during his imprisonment.

There are remaining five or six cases of consumption of old standing, who will be an expense to the prison. These cases were never fit for hard labor. Four ran away from the asylum, hospital and almshouse; one with limbs frozen: they will be a trouble and a charge where proper hospital ward is wanting. Very few surgical accidents from machinery have occurred. Total number of male cases treated were seventy-four, and females twelve. The prison has been conducted as usual, and I believe the inmates have been treated with kindness by the officers of the place, and I have pleasure in saying that I have always received the ready aid and help of all those on duty in the institution.

I have the honor to be,

Your obedient servant,

THOMAS S. WETMORE, M. S.,

Surgeon, St. John Penitentiary,

New Brunswick.

To the Chairman of

Board of Directors of Penitentiaries.

HALIFAX PENITENTIARY.

WARDEN'S REPORT.

HALIFAX PENITENTIARY,

1st January, 1872.

SIR,—In submitting to you my second Annual Report, I am happy to inform you that during the past year the affairs of this prison have progressed in a very favorable manner. The system which I adopted at the outset, of kindness and concilitation has been so productive of good that I am encouraged to proceed in my present course, believing it to be the best, the only true way of reclaiming those upon whom coercion and harshness had hitherto been tried in vain,—I did not flatter myself that my plan would succeed with *all*. Even under the most favourable circumstances kindness will be repaid with ingratitude, and leniency abused; but such cases, for the honor of humanity are exceptional, and

my charge, as a whole, has not been worse than the average, in this respect. Among the prisoners there may be one or two, perhaps, upon whom kindness seem to be thrown away, and any irregularity which has occurred among the others has been clearly traced to their influence. Happily, however, the well-disposed, which embrace nine-tenths of the whole, now understand the evil motives of those who tempted them to an infringement of discipline only to betray.

During the year there have been one escape and one attempt to break prison. The first mentioned occurred in the person of a recently imprisoned convict who made his escape from the hayfield, but was found, a few hours afterwards by his guard, concealed in the adjacent woods. The attempt to break prison was discovered in time to prevent much mischief, and steps were immediately taken to prevent similar escapades in that direction. The "evil spirit" of the prison was apparent in both the foregoing offences; the delinquents were duly punished by suspension of certain privileges, among the most cherished of which were the loss of cell lamp, and the use of the general library.

Speaking of the Library—it is a source of much rational amusement and instruction, and the few volumes therein have been read and re-read many times over. The books are changed every week, and all who can read, and by good conduct have earned the privilege, gladly avail themselves of it. A fresh supply of books would be very acceptable indeed, and most gratefully received.

During the year past two convicts and one prisoner have died. The Sanitary condition of the convicts will be shewn by the accompanying Report of the Medical Officer, and their moral and educational progress by the Reports of the Chaplains and Schoolmaster.

The fitting up of the Protestant Chapel and the building of a new wharf are the chief works which have been performed within the past twelve months.

Preparations, on a limited scale, have been made for the manufacture of Corn brooms. Additional accommodation will be required for this branch of prison industry.

As hitherto, the chief earnings of the institution have been confined to the contract work done in the shoemaking department.

I would beg to call the attention of the Board of Directors to the present unsafe condition of the outer wall of the prison.

I experience great convenience from now having all of the books of the Penitentiary kept in my office and under my immediate supervision,

I have also pleasure in stating that the officers of the prison, generally, have been attentive and regular in the discharge of their respective duties.

Hoping that the above, with the several accompanying Schedules and Reports will be sufficiently comprehensive and satisfactory.

I have the honor to be, Sir,

Your obedient servant,

ROBERT DONKIN,

Warden.

T. J. O'Neill, Esq.,
Chairman of Directors, &c.,
Ottawa.

Number of Convicts employed in the various Departments, on 30th December, 1871:—

Shoemakers, 15; Blacksmiths, 2; Carpenters, 1; Tailors, 3; Masons, 1; Dining, Kitchen and Washhouse, 7; Farm, Wood-cutting &c., 11; Matron's Department 1:—Total, 41.

Return shewing number of days' work in the several departments during the year 1871 :—

Shoemakers, 5,100 ; Blacksmiths, 300 ; Carpenters, 600 ; Masons, 610 ; Tailors, 620 ; Dining hall, Kitchen and Wash-house, 1,975 ; Farm, Wood-cutting, Oakum-picking and other work, 3,365 ;—Total 12,670.

Number of days of Remission earned by convicts during 1871 :—

January, 102 ; February, 91½ ; March, 99 ; April, 102 ; May, 107 ; June, 105 ; July, 102 ; August, 95 ; September, 95 ; October, 95 ; November, 95 ; December, 99 : —Total 1,187½.

NUMBER and description of Punishment for 1871.

—	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Total.
Admonished...	1	.....	....	.....	.....	1	.....	.....	.....	1	.....	.....	3
Confined to cell	.....	.....	.....	.....	.....	.....	1	.....	.....	.....	.....	.....	1
Loss of privileges.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	3	3
Dark cells.....	.....	.....	.....	.....	.....	2	.....	.....	.....	.....	.....	1	3
	1	.....	.....	.....	.....	3	1	.....	.....	1	.....	4	10

MOVEMENT of Prisoners, Halifax Penitentiary, from 1st January till 31st December, 1871.

—	Common prisoners.			Convicts.			Total.
	Under 16.	Over 16.	Total.	Under 16.	Over 16.	Total.	
Remaining at midnight, 31st December, 1870, Males	.....	11	.....	.....	35	.....	46
Remaining at midnight, 31st December, 1870, Females	.....	....	.....	.....	.....	.....	....
Admitted from county gaols, Males.....	.....	2	.....	.....	6	.....	8
" Females....	.....	.....	.....	.....	1	.....	1
Court martial, Males	.....	9	.....	.....	.....	.....	9
			22			42	64
Departures.							
By expiration of sentence, Male	.....	13	.....	.....	6	.....	.....
" Female	.....	.....	.....	.....	.....	.....	.....
Death, Male	.....	1	.....	.....	2	.....	.....
" Female	.....	.....	.....	.....	.....	.....	.....
Order of Commanding Officer, Males...	.....	1	.....	.....	.....	.....	.....
			15			8	24
Remaining at midnight, 31st December, 1871, Males	.....	7	.....	.....	33	.....	40
Remaining at midnight, 31st December, 1871, Females	....	.....	....	.....	1	.....	1
					34		41

NOMINAL LIST of Convicts re-committed during 1871.

Name.	No. of Commitments.	Crime.
Thomas Lonergan.....	Three	Larceny and false pretences

STATEMENT of Convicts received during 1871.

	Male.	Female.	Total.
Race.			
White	17	1	
Colored.....	.....	.....	18
Nationality.			
England	5		
Scotland.....	4		
Ireland	3		
Wales	1		
Nova Scotia	4	1	18
Religion.			
Church of England	8		
Presbyterian	3		
Roman Catholic.....	5	1	
Methodist	1		18
Education.			
Could read and write on entering.....	13		
Could not „ „	4	1	18
Age.			
From 15 to 20.....	2		
20 to 30.....	6		
30 to 40.....	7		
40 to 50.....	.....	1	
50 to 60.....	2	.....	18
Length of Sentence.			
42 days ..... (Military Prisoners.)	1		
84 „ ..... (Military Prisoners.)	4		
112 „ ..... (Military Prisoners.)	1		
168 „ ..... (Military Prisoners.)	3		
1 year and 3 months.....	1		
1 „ 6 „	1		
2 years	4	1	
4 „	1		
9 „	1		18

STATEMENT of Convicts received during 1871.—*Continued.*

	Male.	Female.	Total.
Crimes.			
Habitual drunkenness	9		
Larceny	4		
Perjury	0	1	
Arson	1		
Larceny and false pretences	1		
Felony	1		
Obstructing railway	1		
			18
Trades.			
Carpenters	2		
Bakers	1		
Hammerman	1		
Masons	2		
Blacksmiths	1		
Laborers	10	1	
			18

ABSTRACT of Inventory of Halifax Penitentiary, 1871.

	$ cts.	$ cts.
Furniture in Warden's apartments	196 70	
Male prison, furniture, bedding, &c	1,009 15	
Female " " "	25 30	
Cook house	51 86	
Dining room	77 58	
Guard room	293 57	
Office	270 27	
Hospital	85 00	
Protestant chapel	41 80	
Catholic "	147 20	
Medicines	100 00	
Fuel	402 00	
Blacksmith's department	98 07	
Tailor's "	70 55	
Shoemaker's "	105 02	
Carpenter's "	73 16	
Mason's "	50 50	
Farm "	440 00	
School books and apparatus	20 00	
General library	35 00	
Wash-house	25 00	
Blocks and tackle, winch, chain, &c	49 00	
In Store.		
Clothing and bedding	777 47	
Provisions	224 53	
Sundries, including broom corn, handles, leather, findings, tools, &c	1,032 00	
		$5,700 73
Architect's Estimate		92,562 50
		$98,263 23

PROTESTANT CHAPLAIN'S REPORT.

HALIFAX PENITENTIARY,
December 30th, 1871.

To the Chairman of Board of Directors of Asylums, Penitentiaries, &c., &c.

SIR,—The year that has just come to a close, like all preceding ones, has been more or less eventful to all the human family, and has been marked by vicissitudes of a solemn and interesting character. This remark will apply in a limited degree to our affairs at the Penitentiary. Some of the convicts who were under my Pastoral care at the commencement of this year having served out their term of imprisonment have obtained freedom, and others, convicted of crimes against the laws of their country, have come in their place.

It is highly satisfactory to me to state that the prisoners committed to my spiritual instruction conduct themselves in an orderly manner, and pay devout attention to the ordinances appointed for Divine worship with which they are favored.

Within the last six months *two* of the prisoners have *died*, one of them was over sixty years of age, the other was in the prime of life. They were carefully attended to by me in their illness, to the final close, and I performed the funeral service at their interment.

The number of Protestant prisoners is at present twenty seven (27), nineteen (19) of whom are *whites* and eight (8) colored.

Divine service is conducted every Sabbath morning, and on Wednesday at *one* p.m. When the prisoners are *sick* I regularly visit them.

Mr. Cotton, our Schoolmaster, I am happy to say, performs the duties of his office faithfully.

I have the honor to be, Sir,
Your obedient servant,
HENRY POPE,
Chaplain.

T. J. O'Neill, Esq.,
Chairman of Directors.

ROMAN CATHOLIC CHAPLAIN'S REPORT.

HALIFAX, N. S.,
January, 22nd, 1872.

To the Chairman of the Board of Directors.

SIR,—I beg to report that the number of Convicts under my charge, 31st December, 1871, is thirteen.

Number Admitted during the year	6
„ Discharged	6
„ Died	1

It gives me pleasure to state that the conduct of the Convicts has been satisfactory, and that in general, they have shown a disposition to avail themselves of the religious advantages afforded them.

I am, Sir,
Your obedient Servant,
THOMAS J. DALY,
Catholic Chaplain.

SCHOOLMASTER'S REPORT.

HALIFAX PENITENTIARY,
1st January, 1872.

SIR,—In submitting this, my eighth Annual Report, I am happy to inform you that during the past year, the Pupils under my charge generally, have made very considerable progress. For the most part they have been obedient, orderly and attentive.

Since a daily school has been ordered by Messrs. the Directors, the progress has been proportionately steady and satisfactory. I am also much indebted to the support of the Warden, and the encouragement of the Chaplains for the pleasure which I experience in the performance of my Schoolroom duties.

As a part of my duty as Schoolmaster, I have attended to the issue of books from the General Library. This is done weekly, and since the 1st January, 1871, there have been 852 issues, which have pretty well ventilated our little stock of books.

There are at present on the School Register :—

White	19	
Coloured	5	—Total 24
Of these, Can read, write and cipher	10	
" " Can read and write a little	9	
" " Cannot	5	—Total 24.

With many thanks for your past kindness and encouragement, which I hope to make myself more worthy of,

I have the honor to be, Sir,
Your obedient Servant,
JNO. F. COTTON,
Schoolmaster.

T. J. O'Neill, Esq.,
Chairman of Directors.

SURGEON'S REPORT.

HALIFAX PENITENTIARY,
December 31st 1871.

To T. J. O'Neill, Esq.,
Chairman of Board of Directors.

SIR,—In framing my report for the year just closed, I find little of interest to communicate, beyond what was contained in my half-yearly reports, dated March 23rd, 1871, and September 18th 1871, respectively.

The sanitary condition of the Prison, compares favorably with that of the preceding year; the number requiring prescription in 1870, was two hundred and seventy-eight, while in 1871, the whole number prescribed for was two hundred and forty-four, the number of Hospital cases is rather larger than in last year, being thirteen in 1871, against eight in 1870.

The mortality has been greater during the past year, than in any one year since the institution was opened for the reception of prisoners in 1844; three out of the six deaths which have occurred since that time, took place during 1871. No. 784 died of tubercular consumption, in April; No. 625 died of Peritonitis, resulting from impacted gall-stones, in July; and No. 685 died of Cerebral Meningitis, in October. The other Hospital Cases were: No. 663, Hæmoptysis; No. 745, Epileptiform Convulsions; No. 759, Rheumatism; No. 579, Asthma; No. 735, Synovitis of knee joint; No. 728, Cardiac disease; No. 729, Chronic Gastritis; No. 616, old Gunshot wound; No. 725, Ischuria; No. 594, Phlebitis. The other cases requiring prescription, which were treated in their cells, were cases of quinsy, catarrh, rheumatic pains, contusions, cramps, indigestion, cutaneous affections, diarrhœa and dysentery.

As regards the hygienic condition of the prison, I have no suggestion to make, except to reiterate the one made in my last annual report, that some better system of ventilation should be introduced into the Shoemakers' shop; I think this will be obvious to the Directors upon personal inspection.

I have much pleasure in bearing testimony to the efficient working of the Institution under the able management of the newly appointed Warden, Mr. Donkin, to whom I am personally indebted for faithfully carrying out my directions as regards the sick.

I have the honor to be,
Your obedient Servant,
R. S. BLACK, M.D., L.R.C.S.E.

MATRON'S REPORT.

HALIFAX PENITENTIARY,
1st January, 1872.

SIR,—I am happy to inform you that the affairs in my department of this institution have progressed comfortably during the past year. I have only one prisoner under my charge, she having been committed in June last, and is employed daily in various useful avocations connected with the prison.

I have the honor to be, Sir,
Your obedient Servant,
ELIZA DONKIN,
Matron.

T. J. O'Neill, Esq.,
Chairman of Directors.

SURVEYOR'S REPORT.

ESTIMATE on Penitentiary for 1871.

	$ cts.	$ cts.
Building, and Walls round do	75,000 00	
Grounds	15,000 00	
		90,000 00
New Walls	466 00	
Improvement to Wharf	150 00	
Bathing House	40 00	
Improvement to Grounds	400 00	
Piggery	40 00	
Stable	200 00	
New floor, Broom Factory	15 00	
New board partition	12 00	
		1,323 00
Warren's roofing on Broom Factory	84 00	
Smithery	200 00	
Carpenter's shop	250 00	
New cover, draw well in yard	20 00	
Wire clothes lines	10 00	
Plastering Broom Factory	35 00	
Chimney to do	17 00	
		616 50
Plastering Protestant Chapel	32 50	
Pulpit for do	20 00	
Cushions do	10 00	
Benches do	15 00	
Carpet do	8 00	
New floor do	19 00	
		104 50
82 locks for cells	410 00	410 00
Plastering Catholic Chapel	23 00	
New floor to do	17 00	
New partitions do	9 00	
Two windows and 1 door do	21 50	
Altar, $30; carpet, $8	38 00	
		108 50
		$92,562 50

GEORGE BLAIKLOCK,
Government Contractor and Surveyor.

HALIFAX, January 23, 1872.

RETURN

To an Address of the HOUSE OF COMMONS, dated 22nd April, 1872; For copies of all correspondence relative to the appointment of a Commissioner or Commissioners for the Indians in Northumberland, N.B., shewing whether said appointments have been made, the salary attached to such Commission, and the duties imposed on the Officer, and whether anything has been done towards the education or other relief of said Indians, as are there resident.

By command.

JOSEPH HOWE,
for Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 29th April, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing, the above Return is not Printed.*]

LISGAR,—

The Governor General transmits, for the information of the House of Commons, certain correspondence, with the award of the arbitrators, on the claims of the Government of Nova Scotia, in connection with the Provincial Buildings at Halifax.

GOVERNMENT HOUSE,
OTTAWA, 30th April, 1872.

FINANCE DEPARTMENT,
OTTAWA, June 22nd, 1872.

SIR,—Your letter of yesterday's date, addressed to the Hon. the Secretary of State for the Provinces, having been transferred to me as Minister of Finance, I have the honour to state that the Canadian Government, in the despatch to which your letter is a reply, desired to carry out the authority given them by the Supply Bill of last Session. Beyond that Act the Government have no power to go, but they are willing that the arbitration shall put the most liberal construction on the language of the Statute. With respect to the stipulation that the Local Government shall retain at a nominal rent the use of the rooms now occupied by the Crown Land Department in the building and as a museum, I have to say that the Government cannot agree to any such stipulation as a necessary preliminary to arbitration; they have no desire to put your Government to any inconvenience, and will agree to allow you to retain the use of the museum and draughting-room during pleasure, but liable to be resumed on six months' notice.

I have, &c.,
(Signed,) F. HINCKS,
Minister of Finance.

The Hon. W. B. Vail,
Ottawa.

GOVERNMENT HOUSE,
HALIFAX, NOVA SCOTIA, July 11th, 1871.

No. 24.

SIR,—With reference to previous correspondence on the same subject, I have the honor to transmit a copy of a Minute of my Executive Council in reply to a letter addressed by the Minister of Finance to the Provincial Secretary, while that gentleman was in Ottawa, relative to the proposed arbitration on the disputed right to the new Provincial Building.

I have the honor to be, Sir,
Your obedient servant,
HASTINGS DOYLE.

The Honorable
The Secretary of State
For the Provinces.

Copy of a Minute submitted to the Lieutenant-Governor of Nova Scotia by the Executive Council, dated 10th July, 1871.

The Council have had under consideration the letter of Sir Francis Hincks, addressed to the Provincial Secretary, under date the 22nd June, and are quite prepared, as they had long desired, to have the matter in dispute in relation to the buildings settled by arbitration; but they cannot consent to such submission except upon the express understanding that the money deducted under the name of interest from the subsidy payable to Nova Scotia, shall be paid to the Provincial Government in the event of the award being in favour of the Province.

The Honorable the Finance Minister states, in referring to the resolution, that "beyond that Act the Government have no power to go, but they are willing that the arbitrators should put the most liberal construction on the language of the Statute." The Council are informed that before the vote was taken on the resolution, Sir Francis Hincks stated most explicitly in Parliament that the amount withheld from the subsidy due Nova Scotia should follow the award. When this point is yielded by the Dominion Government as a preliminary to the arbitration, and they further agree to the use by the Provincial Government of the museum, and of the room now used as a draughting-room by the Crown Land Department, the Provincial Government will be prepared to accede to the request of Sir Francis Hincks, in his letter of the 27th April, addressed to His Excellency the Governor-General, approved in Council on the 18th April, 1871, and appoint an arbitrator to act with one to be named by the Dominion Government; and when the umpire has been agreed upon and the three arbitrators have consented to act and to decide within six months of the date of their appointment, the building shall then be made available for the purposes indicated in the resolution.

(Signed,) WILLIAM ANNAND,
W. B. VAIL,
HENRY W. SMITH,
WILLIAM GARVIE,
C. P. FLYNN,
JOHN FERGUSON,
ROBERT ROBERTSON.

HALIFAX,
10th July, 1871.

(No. 437.)

OFFICE, SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 15th July, 1871.

No. 822. SIR,—I have the honor to acknowledge the receipt of your Despatch, No. 24, of the 11th instant, transmitting, with reference to previous correspondence on the subject, a copy of a Minute of your Executive Council, relative to the proposed arbitration on the disputed right to the new Provincial Building.

I have, &c.,
(Signed,) JOSEPH HOWE.

Lieutenant-General,
Sir Hastings Doyle, K.C.M.G.,
Lieutenant-Governor, Halifax.

On the minute of the Honorable the Executive Council of the Province of Nova Scotia, transmitted in the despatch of His Excellency, Sir Hastings Doyle, dated the 11th instant, the undersigned has the honor to report that it has already been clearly explained to the Government of Nova Scotia that it is not in the power of the Dominion Government to agree to pay to Nova Scotia any sum beyond that voted by Parliament. In

explaining to Mr. Vail as the undersigned did in his letter of the 22nd ultimo, that the Dominion Government was willing that the arbitrators should put the most liberal construction on the language of the statute, the object was to leave the arbitrators as unfettered as possible in their deliberations on all claims in relation to the new Provincial Building submitted by the Government of Nova Scotia, whether covered by the vote of Parliament or not. Should the arbitrators award Nova Scotia any amount beyond the Parliamentary vote, it obviously could only be paid after the sanction of Parliament had been obtained; that with regard to the joint occupation of the building by the two Governments, the Minister of Finance can only express his regret that the proposal made in his letter of the 22nd June, should not be considered satisfactory. It seems impossible that the Dominion Government can give a right of occupation to the Nova Scotian Government to any part of the building; and as no compensation is to be given for the rooms claimed, and as no claim to these rooms was made until recently, the undersigned cannot but regret that such an obstacle should be interposed to a settlement of the question in controversy between the two Governments. The undersigned feels bound to notice the assertion in the Minute of the Executive Council of Nova Scotia that "Sir Francis Hincks stated most explicitly in Parliament that the amount withheld from the subsidy due Nova Scotia should follow the award." The undersigned must express his surprise and regret that the Executive Council of Nova Scotia should have inserted such a statement on no authority beyond "the Council are informed." When the Honorable Mr. Vail, who visited Ottawa with a view to the settlement of the matter in controversy, was aware that he, Sir Francis Hincks, denied the accuracy of the report which Mr. Vail informed him was founded on a telegraphic message from Mr. Jones, the member for Halifax, which message, when produced by Mr. Vail, did not bear out, in the opinion of the undersigned, the construction placed upon it. The undersigned has taken pains to ascertain the opinions of gentlemen on both sides of the House present at the discussion, which have confirmed him in his own opinion that he could not have stated what it is alleged in the Minute of the Executive Council he did state, but he may point out that it is quite unnecessary to enter on a controversial discussion of what he actually did say, as he had no authority whatever to commit the Dominion Government to pay one dollar beyond what was sanctioned by Parliament. The whole is respectfully submitted.

F. HINCKS,
Minister of Finance.

29th July, 1871.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor-General in Council, 31st July, 1871.

On the Minute of the Honorable the Executive Council of the Province of Nova Scotia, transmitted in the despatch of His Excellency Sir Hastings Doyle, dated the 11th instant, on claims in relation to the new Provincial Building, submitted by the Government of Nova Scotia.

The Honorable the Minister of Finance, to whom said Minute was referred, reports that it had already been clearly explained to the Government of Nova Scotia that it is not in the power of the Dominion Government to agree to pay to Nova Scotia any sum beyond that voted by Parliament. In explaining to Mr. Vail as he, the Minister of Finance did in his letter of the 22nd ult., that the Dominion Government was willing that the arbitrators should put the most liberal construction on the language of the statute, the object was to leave the arbitrators as unfettered as possible in their deliberations on all claims in relation to the new Provincial Building submitted by the Government of Nova Scotia, whether covered by the vote of Parliament or not.

That should the arbitrators award Nova Scotia any amount beyond the Parliamentary vote it obviously could only be paid after the sanction of Parliament had been obtained,—that with regard to the joint occupation of the building by the two Governments the Minister of Finance can only express his regret that the proposal made in his letter of

22nd June should not be considered satisfactory. That it seems impossible that the Dominion Government can give a right of occupation to the Nova Scotia Government to any part of the building, and as no compensation is to be given for the rooms claimed, and as no claim to those rooms was made until recently, the Minister of Finance stated that he cannot but regret that such an obstacle should be interposed to a settlement of the question in controversy between the two Governments. That he feels bound to notice the assertion in the Minute of the Executive Council of Nova Scotia, that "Sir Francis Hincks stated most explicitly in Parliament that the amount withheld from the subsidy due Nova Scotia should follow the award," that he must express his surpise and regret that the Executive Council of Nova Scotia should have inserted such a statement on no authority beyond "the Council are informed,"—when the Honorable Mr. Vail, who visited Ottawa with a view to the settlement of the matter in controversy was aware that he, Sir Francis Hincks, denied the accuracy of the report which Mr. Vail informed him was founded on a telegraphic message from Mr. Jones, the member for Halifax, which message when produced by Mr. Vail did not bear out, in the opinion of the Minister of Finance, the construction placed upon it. That he, the Minister of Finance. had taken pains to ascertain the opinions of gentlemen on both sides of the House present at the discussion, which have confirmed him in his own opinion that he could not have stated what it is alleged in the Minute of the Executive Council he did state, but he adds that he may point out that it is quite unnecessary to enter upon a controversial discussion of what he actually did say, as he had no authority whatever to commit the Dominion Government to pay one dollar beyond what was sanctioned by Parliament.

The Committee concur in the Report of the Minister of Finance, and submit the same for Your Excellency's approval,—and if sanctioned, they suggest that a copy of this Order in Council be transmitted to the Lieutenant-Governor of Nova Scotia.

Certified.

W. H. Lee,
Clerk, Privy Council.

(No. 504.)

Office, Secretary of State eor the Provinces,
Ottawa, 4th August, 1871.

No. 822. Sir,—Adverting to your Despatch No. 24, of the 11th ult., and to previous correspondence on the subject, I have the honor to transmit to you herewith, for the information of your Government, a copy of an Order of His Excellency the Governor General in Council, on the Minute of Your Executive Council, a copy of which accompanied your despatch, on claims in relation to the New Provincial Building submitted by the Government of Nova Scotia.

31st July, 1871.

I have, &c.,
(Signed,) Joseph Howe.

Lieut.-General
Sir Hastings Doyle, K.C.M.G.,
Lieut.-Governor, Halifax.

Government House,
Halifax, Nova Scotia, August 31st, 1871.

No. 32. Sir,—I have the honor to transmit to you a copy of a minute of my Executive Council, dated 24th August, concerning the New Provincial Building, in reply to the minute of the Privy Council of Canada, which was transmitted to me in your despatch of the 4th instant.

A.—24th Aug., 1871.

At the request of my Government, I submitted a copy of this Minute to the Finance Minister of Canada, who was at that time staying here. The reply which Sir Francis

Hincks made to that minute will more properly be communicated to His Excellency the Governor General through another channel; yet, in order that this correspondence may be complete, I transmit a copy of it herewith.

B.—24th Aug., 1871.

To this memorandum my Council made a reply, a copy of which is also enclosed marked C. and the last document, marked D. is a copy of an agreement made after further negotiations, and signed in duplicate by Sir F. Hincks, on behalf of the Dominion Government, and by the Honorable W. B. Vail, on behalf of that of Nova Scotia, recording the names of the gentleman whom each Government has nominated as arbitrator, and also providing for the appointment of an umpire, should the two arbitrators be unable to agree upon any person for that position.

C.—25th Aug., 1871.

D.—30th Aug., 1871.

I have much pleasure in requesting you to submit to His Excellency the Governor General these several documents, which I trust may be considered as finally bringing to a close a controversy which has already been prolonged to an inordinate length, and as providing for the satisfactory adjustment of a difficulty that has for some time caused embarrassment to the two Governments interested in this question.

I have the honor to be, Sir,
Your obedient servant,
HASTINGS DOYLE

Copy of a Minute of Council, passed the 24th day of August, 1871.

(A.)

The Council have had under consideration the Report of a Committee of the Honorable the Privy Council of the Dominion of Canada, dated at Ottawa, the 31st day of July, 1871, in reference to the Minute of this Council, on the subject of the new Provincial Building in Halifax.

In reply to that Report, the Council feel called upon to make the following observations:

The Report does not in itself appear to explain so fully and so clearly as the Council could wish, the precise range of arbitration, especially on financial matters relative to the new Provincial Building, to which the Government at Ottawa assents. It is with a sincere and earnest desire for the speedy settlement of this question that the Council now requests a more explicit statement.

In the Report referred to occurs the following paragraph:—

"In explaining to Mr. Vail, as he, the Minister of Finance did in his letter of the 22nd ult., that the Dominion Government was willing that the arbitrators should put the most liberal construction on the language of the statute, the object was to leave arbitrators as unfettered as possible in their deliberations on all claims in relation to the new Provincial Buildings submitted to the Government of Nova Scotia, whether convened by the vote of Parliament or not."

The Council hope that they are warranted in believing that the Dominion Government are prepared to submit "all claims" financial or otherwise, so entirely and absolutely to the proposed arbitrators that, in the event of an award authorizing the payment to Nova Scotia of a sum larger than the amount mentioned in the Resolution passed by the House of Commons last Session, the Dominion Government will not only accept such award but will also take the necessary steps to make it effectual by obtaining from the Dominion Parliament any such excess over the sum already voted, and making early payment of the same to the Government of Nova Scotia.

If this is clearly understood the Council will feel warranted in expecting with satisfaction the immediate commencement of the arbitration, and speedy disposal of this question.

As regards the references at the close of the Report to statements alleged to have been made by the Honorable the Provincial Secretary of Nova Scotia while recently at Ottawa, the Council regret that such references are considered desirable, as the Honorable Secretary informs the Council that he certainly did not make such statements, and that

these could only be attributed to him through some unaccountable mistake, for which he is not responsible.

The Council trust that no matters of this kind may be introduced to interfere with an early settlement of the new Provincial Building question, which would be not only just to Nova Scotia, but in any case beneficial to the public interest at large.

Certified.

W. B. VAIL,
Clerk of Council.

(Copy—B.)

The undersigned Minister of Finance, having had communication of a Minute of Council, passed on the 24th instant by the Lieutenant-Governor and Executive Council of Nova Scotia, has the honor to submit the following observations thereon.

The undersigned begs most cordially to respond to the expression in the Minute of a sincere and earnest desire for the speedy settlement of the question in controversy with regard to the new Provincial Building between the Government of the Dominion and the Government of Nova Scotia. He has no hesitation in assuring the Government of Nova Scotia, that, in consenting that all money claims, whether relating to the said Building which have been preferred by the Government of Nova Scotia, including not only the sum named in the resolution of the House of Commons, but also the amount deducted by the Dominion Government from the Nova Scotia subsidy should be referred to arbitration, it was intended by the Dominion Government to give full effect to the award of the arbitrators to whom these claims are to be referred with as little delay as the possible necessity of a reference to Parliament may cause. The undersigned trusts that, if he calls attention to a word in the Minutes which he thinks susceptible of a construction that might lean to misunderstanding, his doing so will be attributed solely to an anxious desire to avoid the possibility of such misunderstanding. The word is "otherwise." As the only claims which the undersigned feels that he has any authority to deal with are "financial," he hopes that such claims alone are contemplated by the Minute of Council as subjects of reference. With regard to the reference to the conversation which took place at Ottawa, between the Honorable Mr. Vane and himself, the undersigned has to express his regret that, through inadvertence, he stated in his report to the Privy Council that Mr. Vail had stated that the telegram,—a copy of which he shewed to the undersigned,—was sent by Mr. Jones, M.P., for Halifax. This the undersigned admits was a mistake. He had a distinct recollection of being shewn the telegram, but it was from others and not from Mr. Vail that he learned that it had been sent by Mr. Jones. The undersigned has no doubt now that this was a mistake, and he therefore regrets that Mr. Jones's name was introduced into the Minute, and more especially that Mr. Vail should have been given as an authority.

The undersigned responds to the desire expressed in the Minute of Council, that no matter of this kind should be allowed to interfere with the early settlement of the Provincial Building question.

(Signed,) FRANCIS HINCKS.

HALIFAX,
August 24th, 1871.

(C.)

Copy of a Minute of Council passed the 25th day of August, 1871.

The Council have had under consideration a communication from the Minister of Finance, dated August 24th, on behalf of the Privy Council of the Dominion of Canada, in reference to a Minute of this Council bearing the same date, on the subject of the new Provincial Building controversy between the Dominion and Nova Scotia Governments.

The Council recognizes with satisfaction the complete concession of that comprehensive basis and scope of arbitration which the Government of Nova Scotia have always felt it their duty to require.

In view of the ready and unqualified assent to the claims of this Government given in the Honorable Finance Minister's communication, the Council feel now that the negotiations on this subject are so far satisfactorily advanced that the appointment of arbitrators between the two Governments comes up for immediate consideration, and the Council therefore trust that they may hear from the Government at Ottawa as soon as possible on this point.

As regards the distinction made in the communication between claims financial "and otherwise," the Council have to state that they do no tmean to embarrass the final settlement ot the questiɔn by pressing any other claims than those already now included in the basis of arbitration by mutual consent.

The Council gladly receive the personal explanations of the Honorable Finance Minister, and are gratified at the renewed assurance of a desire to end the new Provincial Building controversy, early, equitably, and on its own merits.

Certified.

W. B. VAIL,
Provincial Secretary and Clerk of Council.

(Copy—D.)

Memorandum of a Conference between Sir Francis Hincks, Finance Minister of Canada, representing the Dominion Government, and the Executive Council of Nova Scotia, on the new Provincial Building Question.

It is agreed that the new Provincial Building question be submitted immediately to the following gentlemen as arbitrators :—

John Boyd, Esq., of St. John, N.B., representing the Dominion Government.

James Duffees, Esq., Halifax, representing the Government of Nova Scotia.

It is agreed that the preliminary duty of the arbitrators now appointed shall be the choice of an umpire, and the two Governments shall agree to and accept whatever selection these arbitrators shall make.

It is further agreed that in the event of the arbitrators being unable to unite in the selection of an umpire, the two Governments, unless some subsequent agreement is made between them, shall take up the names of John Liversey, Esq., of Londonderry, Nova Scotia, and W. R. T. Clench, Telegraph Superintendent of St. John, and shall choose one of those named by lot, and that the gentleman so selected shall be considered and accepted by the Government as umpire between the arbitrators on this question.

Dated at HALIFAX, N. S.,
August 30th 1871.

SIGNED, in duplicate,
On behalf of the Government of the
Dominion of Canada,
(Signed) F. HINCKS,
" W. B. VAIL,
Provincial Secretary.

(No. 41.)

GOVERNMENT HOUSE,
HALIFAX, November 13th, 1871.

SIR,—I have the honor to state, for the information of His Excellency the Governor-General, that the three arbitrators to whom the dispute in reference to the new Provincial Building was, by consent of the Dominion and Provincial Governments referred, met in

this city on the 8th, 9th, 10th, and 11th days of this month, and that, having heard arguments and statements on both sides of the question at issue, they on Saturday last, agreed upon an award, of which I now have the honor to enclose a certified copy.

I have, &c.,
(Signed) HASTINGS DOYLE.

The Honorable Secretary of State
For the Provinces.

(Copy.)

The arbitrators appointed by the Government of the Dominion af Canada, and the Government of the Province of Nova Scotia, under the terms of agreemeent entered into between Sir Francis Hincks of the one part and Honorable W. B. Vail of the other part, for the purpose of taking into consideration "all money claims whatever relating to the new Provincial Building which have been preferred by the Government of Nova Scotia, including not only the sum named in the Resolution of the House of Commons, but also the amounts deducted by the Dominion Government from the Nova Scotia subsidy."

Having met in the City of Halifax, in the Province of Nova Scotia, on the eighth and three following days of this present month of November, and having heard the very able arguments of Counsel, the Honorable William Garvie, for Nova Scotia, and W. H. Tuck, Esq., for the Dominion, the arbitrators, looking at the wide scope granted them under the above authority from Sir Francis Hincks for and on behalf of the Dominion Government, to take into consideration a large and generous view of the financial position of the new Provincial Building, have preferred to ignore the claim made for sixty six thousand three hundred and eighty-five dollars, and the withheld amount of subsidy, and to base their decision on the claim for joint ownership and occupation of the building as well as for other claims which have been presented, and as it has been clearly shewn that a portion of the building was intended for departments connected with the Local Government, and also a Provincial Museum, &c., they are therefore of opinion that allowance should be made for this portion of the building as though it had been separate and distinct, (in which case it would have been handed over to the Local Government without question), and they therefore adjudge that the Dominion Government do pay to
$70,000. the Local Government the sum of seventy thousand dollars, as the value
$10,000. of such portion of the building, and a further sum of ten thousand dollars for interest on the same to date, and that this be in full of all demands, of the Local Government upon the Dominion Government for the Provincial Building so called.

The arbitrators indulge the hope that the harmony and good feeling which prevailed in all their deliberations may be extended throughout the entire Province, and that the settlement of the dispute will lead to a harmonious working of the Governments, both Local and General.

The fees to follow the award.

Dated in Halifax, Nova Scotia, the 11th day of November, in the year of Our Lord one thousand eight hundred and seventy-one.

(Signed,) JOHN BOYD,
For Dominion of Canada.

" JAMES B. DUFFEES,
For Province of Nova Scotia.

Fees ..... $4,000.

I fully concur in the above award.

(Signed,) WILLIAM HEARD,
Umpire.

A true copy.

(Signed,) W. B. VAIL,
Provincial Secretary.

RETURN

To an Address of the HOUSE OF COMMONS, dated 17th April, 1872; For a Return of the Official Report or Reports relative to the death by an accident, on the Government Railway between Windsor and Halifax, of Albert Trider, an employé on the road; especially the proceedings on the Coroner's inquest, and the findings of the Jury; and also a Return of all accidents on the road, and of all damage to person or property by such accidents during the past year, and of the causes of such accidents.

By command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 1st May, 1872.

[In accordance with the recommendation of the Joint Committee on Printing, the above Return is not printed.]

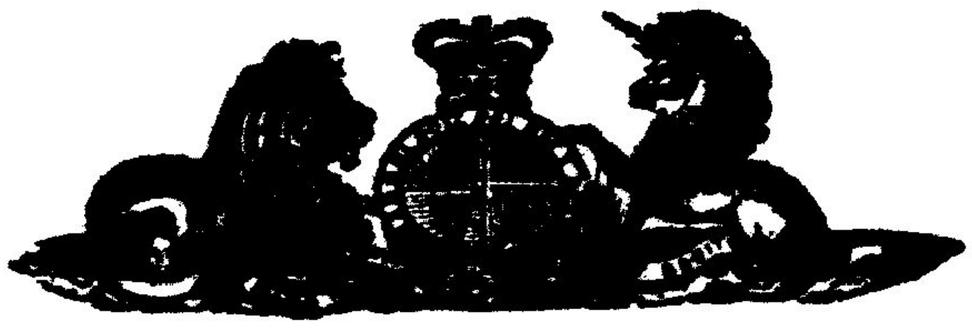
GEOLOGICAL SURVEY OF CANADA.

ALFRED R. C. SELWYN, F.G.S., DIRECTOR.

REPORT OF PROGRESS

FOR

1871-72.



Montreal:
PRINTED BY JOHN LOVELL, 23 ST. NICHOLAS STREET.
1872.

MONTREAL : JOHN LOVELL, PRINTER.

TABLE OF CONTENTS.

I.

PAGE

INTRODUCTORY REPORT BY MR. SELWYN..... 11–15
Survey of Springhill Coal-field..... 12
Mr. Lowe's work 14
Map of the Eastern Townships 14
Investigations of Mr. Billings..... 14
Palæontological collections 14
Dr. Dawson's gratuitous labors 15
Dr. Hunt's work..... 15

II.

JOURNAL AND REPORT ON BRITISH COLUMBIA BY MR. SELWYN..... 16–72
Instructions from Ottawa 16
Difficulty in obtaining means of transport..... 18
JOURNAL OF EXPEDITION..... 19
Journey from Montreal to Victoria 19
Selection of route; camp equipments 20
Character of the country in the Fraser Valley..... 23
Kamloops, and navigation on Kamloops Lake..... 24
Valley of the Thompson as far as Clearwater..... 25
Pass between the Valley of the Thompson and Lake La Hache 26
Character of Raft River 27
Glacier in the Thompson Valley..... 29
Supposed sources of Mad and Raft Rivers..... 30
Valley of Blue River 31
Autumnal rains; absence of wind; Limestone River..... 34
Albreda Lake 37
Nature of the country around Cranberry Lake..... 39
Selwyn River and Tête Jaune Cache 40
Moose Lake; forest trees..... 42
Robson's Peak; preparations for return to Kamloops..... 44
Flats suitable for cultivation 47
Distances from Kamloops; elevations..... 48
GEOGRAPHICAL FEATURES 49
Boundaries, mountains, &c..... 49
Drainage 50
GEOLOGICAL STRUCTURE..... 51
Rocks of Vancouver Island 52
Gold on Leech River; glacial action 53
SUPERFICIAL DEPOSITS..... 54
Terraces and their origin..... 55
Gold and gold mining in the Lower Fraser Valley 56
THE VOLCANIC SERIES; THE COAL AND LIGNITE GROUP OF THE MAIN-LAND; THE COAL ROCKS OF VANCOUVER ISLAND..... 56
Character of Rocks; Copper and Silver Ores; Eureka mine..... 57

PAGE

Fossiliferous beds; section at Quesnel Mouth..... 58
Vapour emissions; fossil plants from Quesnel Mouth..... 59
JACKASS MOUNTAIN CONGLOMERATE GROUP..... 60
Sandstone, shales and conglomerates..... 60
UPPER CACHE CREEK GROUP..... 60
Limestones and shales; Marble Canon..... 60
Supposed Cretaceous fossils..... 61
LOWER CACHE CREEK GROUP..... 61
Character of the rocks; fossils..... 61
ANDERSON RIVER AND BOSTON BAR GROUP, AND UPPER ROCKS OF LEATHER PASS AND MOOSE LAKE..... 62
Shales and calcareous sandstones..... 62
Leather Pass, Slate Mountain and Moose Lake..... 63
CASCADE MOUNTAINS AND VANCOUVER ISLAND CRYSTALLINE SERIES..... 63
Gneiss holding epidote; crystalline limestone..... 63
Quartz veins; porphyry; feldspathic veins; building-stone..... 64
GRANITE, GNEISS AND MICA-SCHIST SERIES..... 64
Characters of the rocks..... 64
Limestone River and Albreda Lake..... 65
Gold indications..... 66
REPORT BY DR. T. STERRY HUNT..... 66
Silver ore from Eureka mine; coal from Nicola River; lignites..... 66
Volcanic Rocks; indurated clay..... 67
CHARACTER OF THE LAND, &c..... 67
Soil of Central Plateau; crops..... 67
Sowing time and harvest; prices at Cariboo; irrigation..... 68
Vegetation, fruits, &c..... 69
Valley of the North Thompson..... 70
Indians; game..... 71
Fisheries and mines; future of the Alpine Province..... 72

III.

REPORT ON THE COAL-FIELDS OF VANCOUVER ISLAND BY MR. RICHARDSON..... 73
Preliminary investigations on the main-land..... 73
Measurement of roads, &c..... 74
COAL DEPOSITS OF VANCOUVER ISLAND..... 75
Trough containing the coal-seams..... 76
Section of the coal-measures..... 77
Beaufort and Baynes Sound Coal Mines..... 78
Section at the Baynes Sound Mines..... 78
Two distinct basins; productive area; quantity of coal..... 80
Fossils; nine-feet and four-feet seams..... 82
Section of the coal-measures on Newcastle Island..... 83
Flag-stones and building materials..... 84
Six-feet seam at Nanaimo; section..... 85
Area of the Nanaimo field; Valdes and other islands..... 87
Fossils; synclinals..... 88
Thickness of Nanaimo coal-measures; salt-springs..... 89
CRYSTALLINE ROCKS..... 89
Diorite; syenite; epidote; crystalline limestone, &c..... 90
Copper pyrites; quartzite..... 91
Supposed Eocrinal columns..... 92

PAGE

SUPERFICIAL DEPOSITS 93
Brick-clay; erratics; the soil and its vegetation 94
NOTE BY DR. DAWSON ON THE FOSSIL PLANTS REFERRED TO BY MR. RICHARDSON 98
List of the more important genera recognized 98
ANALYSES AND NOTES BY DR. T. STERRY HUNT 98
Coals from different seams 99
Lignite; notes on rock specimens 99
Analysis of diorite 100

IV.

REPORT OF MR. BELL ON THE COUNTRY BETWEEN LAKE SUPERIOR AND THE ALBANY RIVER 101
Table of distances surveyed 102
ADDITIONAL NOTES ON THE GEOLOGY OF LAKE NIPIGON 103
Impure limestones; sandstones; iron pyrites 104
SURVEY OF WABINOSH RIVER 105
Geology of the Wabinosh route 105
Pikitigouching River; soil and rocks 106
Ogoké River and Ka-gé-i-na-gami Lake 107
Rocks between Nipigon and Shoal Lakes 108
Albany River; trap; granite 109
Passage of Huronian into Laurentian rocks 110
Crops at Martin's Falls 110
Gneiss and limestone 111
Fossils; hematite 112
Kenogami River; marine shells; lignite 112
Marls, shale and earthy limestone 113

V.

REPORT OF MR. McOUAT ON THE COUNTRY BETWEEN LAKE ST. JOHN AND LAKE MISTASSINI 115
Survey from Mistassini River to Mistassini Lake 116
Laurentian rocks 117
Feldspathic rock, perhaps belonging to the copper-bearing strata 118

VI.

REPORT OF MR. VENNOR ON THE COUNTIES OF LEEDS, FRONTENAC AND LANARK, WITH NOTES ON THE GOLD OF MARMORA. 120
Extent and nature of work defined 120
Iron ores 121
Phosphate of lime 123
Phosphate locations 124
Gold in Marmora 129
Granite and its age 130
Modes in which gold occurs 131
Stamp-mills and furnaces 133
Assays of ore from the Gillen mine, by Professor Chapman 137
Table of assays by Dr. B. J. Harrington 141

VII.

REPORT OF MR. BAILEY ON INVESTIGATIONS IN NEW BRUNSWICK 142
Huronian series; Coastal group 143
Exotic granites; carboniferous rocks; trappean rocks 144

VIII.

PAGE
MINING AND MINERAL STATISTICS, COMPILED BY MR. ROBB..... 147

MAPS AND DRAWING OF FURNACE.

A map accompanies the Report of Mr. Richardson, illustrating the distribution of the coal-fields of the east coast of Vancouver Island. Mr. Vennor's Report also contains a map showing the course of the auriferous zone in Marmora, and a drawing of the Dunstan revolving cylinder furnace.

GEOLOGICAL SURVEY OF CANADA.

REPORTS

OF

EXPLORATION AND SURVEYS.

1871-72.

SUMMARY REPORT

OF

GEOLOGICAL INVESTIGATIONS,

BY

MR. ALFRED R. C. SELWYN;

ADDRESSED TO

THE HONORABLE JOSEPH HOWE, M.P.,

SECRETARY OF STATE FOR THE PROVINCES.

MONTREAL, 20th May, 1872.

SIR,—I have the honor to transmit to you herewith, for the information of His Excellency the Governor in Council, the undermentioned Reports relating to the investigations made by the Geological Survey during the past year. Reports 1871.

1. Journal and Report of preliminary Explorations in British Columbia, by Mr. Alfred R. C. Selwyn.
2. Report on the Coal-fields of the East Coast of Vancouver Island, with a map of their distribution, by Mr. James Richardson.
3. Report of progress in Exploration and Surveys of country between Lake Superior and the Albany River, by Mr. Robert Bell.
4. Preliminary Report of Exploration and Surveys in the country between Lake St. John and Lake Mistassini, by Mr. Walter McOuat.
5. Progress Report of Exploration and Surveys in the Counties of Leeds, Frontenac and Lanark, in the Province of Ontario, with a plan of the Township of Marmora, showing the position of the worked Gold Mines, and the course of the Auriferous Zone, by Mr. H. G. Vennor.
6. Report of progress in Geological Investigations in New Brunswick, by Professor L. W. Bailey.
7. Summary of Statistics of Mines and Mineral Produce of the Dominion, prepared from Official Returns and other sources, by Mr. Charles Robb.

Progress of Geological Explorations.

GEOLOGICAL EXPLORATIONS.—The general progress of the Geological Survey during the past year has been satisfactory, and besides the investigations and surveys, of which the particulars are given in the above named Reports, exploration has been continued in Nova Scotia by Mr. Scott Barlow.

Survey of Springhill Coal-field.

In my Summary Report dated May, 1871, I stated that the survey of the Springhill Coal-field, Cumberland County, Nova Scotia, commenced by Mr. Scott Barlow on the 6th September, had progressed satisfactorily, and the facts then ascertained were briefly stated.

Last spring, Mr. Barlow was directed to continue this survey, and to extend it as far as possible over the whole space embracing the productive deposits. With this view, he directed his operations so as to include the northern outcrop, and to acquire a knowledge of the general structure of the whole field; but having no map on a scale sufficiently large for practical purposes, it was considered essential that the roads, rivers and streams running through the district should be carefully measured, and all the details of the rock exposures faithfully recorded.

He commenced his operations by surveying the roads running south to the Maccan River, then those running in an easterly direction to the post-road between Truro and Amherst; and afterwards followed the post-road in a north-westerly direction, to Styles' mine on the north outcrop, thence in a westerly direction to the Little Forks (now called Athol), and from that to the Scotia mine at Maccan River, on the road to the South Joggins.

Measurements by Mr. S. Barlow.

He measured in all about eighty miles of roads, rivers, streams and lines through the woods, and registered the strike, dip and mineral character of every rock exposure met with. Eight miles of the distance mentioned were measured by theodolite and chain, and the remainder by prismatic compass and chain. About one third of the measurements were made in the woods under great difficulties, in consequence of the unevenness of the ground, and a thick growth of underbrush, which necessitated a great deal of chopping. The area included in the measurements may be about sixty square miles.

Pits and borings.

The positions of all pits and borings sunk by parties exploring for coal were accurately determined, the facts disclosed by these carefully recorded, and any plans, sections or documents, with other information that might be of value, were collected and copied: specimens of the rocks and fossils were procured, and these materials are now all in the Geological Survey Office in Montreal. The last month of the season was spent in proving the outcrops of some of the coal-seams by borings, and by sinking small pits in positions where the work of the proprietors appeared to be deficient, but where a small outlay of the funds of the Survey seemed likely to determine points of importance. A heavy fall of snow on the 25th

November, interrupted these operations before Mr. Barlow had satisfied himself with regard to several of them.

Extent and value of the coal-seams.

Of the extent and value of the coal-seams, it would be premature to say more than is stated in my Summary Report of last year, until more facts are ascertained and put together, and a map is constructed to shew the relation of one part to another. Sir William Logan made a personal visit to the Cumberland coal-field in the middle of July, and informs me that Mr. Barlow was doing his work remarkably well; he considers that the proprietors of the area where the chief explorations of the district were in progress were fortunate in the employment of Mr. John Anderson, an intelligent practical miner, who has gained his experience in Scotland and in Nova Scotia; but that his skill is much interfered with by his destitution of proper instruments. He had been very obliging in giving Mr. Barlow all the information in his power.

Outcrop of seams.

In the area above referred to (one of the "Black" areas), under Mr. Anderson's superintendence, what appears to be a valuable group of coal seams, has been traced on the south outcrop from a slope on the eleven-feet seam (which is one of the group) for about twenty-five chains to the north-eastward, where they are interrupted by some irregularity or disturbance. But, in a bearing N. 10°. E. from this point, and at a distance of about twenty-three chains, what is considered by Mr. Anderson to be the eleven-feet seam of the same group has been met with and traced for about forty-two chains on the strike; when, according to Mr. Anderson's view, there is another turn carrying the seam to the north-westward. In this bearing he has traced the outcrop for about a quarter of a mile. Beyond this, in about the same bearing, at a distance of about fourteen chains, he has met with two seams, but he is undecided whether either of them isthe eleven-feet seam.

Eleven-feet seam.

The position where his work has been suspended is about one and three-quarter miles from the Intercolonial railroad, across the measures; but where the seam would intersect the line of the railroad on the strike, were the search carried further, is a matter of great doubt. Two turns have already occurred in it, and there may be more. The object of the borings made by Mr. Barlow, which were on two transverse lines, one on each side of the first disturbance mentioned, and about thirty-two chains apart, was to determine whether the seams on the opposite sides of this disturbance were really the same. This he expected to do by probing down to each seam of each group in succession, and thus ascertaining that the thicknesses of the seams and the distances between them were the same in both localities; than which there could be no better proof. He was however not able to complete the necessary work last autumn, but it is proposed to do so this season, and likewise to prosecute the general exploration and survey of this important coal-field.

Object of borings made by Mr. Barlow.

Laurentian limestone bands of the Lièvre, Petite Nation and Rouge Rivers.

Mr. James Lowe has further advanced the work, which he has been engaged upon for several seasons, of tracing and mapping the distribution of the Laurentian limestone bands on the upper waters of the Lièvre, Petite Nation and Rouge Rivers.

Mr. Robert Barlow has made considerable progress during the year towards the completion of the map of the Eastern Townships, which is being engraved in London in four sheets, on a scale of four miles to one inch.

Map of the Eastern Townships.

This map embraces a large region extending on both sides of the St. Lawrence from Montreal to Quebec, and, it is hoped, will be ready for publication next year. Mr. Arthur Webster made measurements last season of nearly seven hundred miles of roads, which were required for the map on the north side of the St. Lawrence between Montreal and Three Rivers.

Investigations and labours of Mr. Billings.

Mr. Billings, in addition to his ordinary labors connected with the arrangement of the collections in the Museum, has been occupied chiefly in the investigation of the fauna of the Lower Potsdam rocks ; and also with the fossils of the Guelph formation. Some portion of his time has been devoted to the study of the collections made in British Columbia. Some of the results of his investigations have been published in the Canadian Naturalist, and others will shortly appear.

Palæontological collections.

On the 22nd of August Mr. Billings left Montreal, accompanied by Mr. Weston, and proceeded to Bic for the purpose of collecting fossils. A number of localities between Bic and the Chaudière were examined, and 500 specimens have been secured which are available for the purpose of the Museum and for scientific investigation. Mr. Billings states that a further collection from the Straits of Belle Isle is required for comparison. As the Lower Potsdam group is there exposed on a large scale, and in an undisturbed condition, that locality is the best known for ascertaining the facts required to work out the palæontology of this formation.

At Hespeler, in the Guelph formation, Mr. Weston, during three visits to the locality, made a valuable collection of 280 specimens, among which is a new genus of great interest, which Mr. Billings has briefly described in the Canadian Naturalist of December last, under the name of *Monomerella*.

Another important collection was made for the Survey by Mr. DeCew in the Waterlime formation in the township of Bertie, county of Haldimand. This consists of sixteen specimens of *Eurypterus remipes ;* some of them in a fine state of preservation.

A collection of 280 specimens of Trenton and Black River fossils from Blue Point, Lake St. John, was made by Mr. McOuat. And about 100 specimens were presented to the Museum by Major Grant, of Hamilton, chiefly from the Clinton group.

Saurian fossil foot-prints.

A very fine series of Saurian fossil foot-prints, from the Carboniferous rocks of Cumberland County, Nova Scotia, was secured for the Geological Museum by Mr. Scott Barlow. They have been examined and described

by Dr. Dawson, who considers them to be of a new species, which he has named *Sauropus unguifer*. Dr. Dawson's description of these interesting fossils will appear in one of the scientific periodicals.* Altogether, there have been about 1,200 specimens added to the collection during the year.

A very valuable addition has likewise been made during the past year, through the kind and gratuitous labors of Dr. Dawson, to the palæontological publications of the Survey; being a Report illustrated with twenty plates, on the fossil Land Plants of the Devonian and Upper Silurian formations of Canada.

Report by Dr. Dawson.

Dr. T. Sterry Hunt spent a part of last summer with Professor Bailey in further geological examinations in Southern New Brunswick. During the winter he has attended to the printing of the volume of Reports for 1870-71, just issued, and he has also devoted a part of his time to examining some of the specimens of rocks and minerals collected by the different exploring parties. By far the greater part of his time has, however, been occupied in correspondence and consultation with persons from all parts of the Dominion and elsewhere, who apply to him for information upon all subjects connected with economic geology, mineralogy and mining industry.

Labours of Dr. Hunt.

This plan of giving gratuitous information and advice personally, to every one who applies for it, at any hour and on any day in the week, though doubtless advantageous to the public, is very unsatisfactory to the officer concerned, who has nothing to shew for his time, thus often uselessly consumed and taken away from what are more properly his official duties as chemist and mineralogist to the Survey.

As a rule all such applications should be made by letter; one day only in the week should be set apart to receive visitors and to attend to personal enquiries, such as cannot well be made or answered in writing, a register being kept of all consultations and enquiries, whether personal or by correspondence, which would be a record of the time which has thus been devoted to the public.

I have the honor to be,
Sir,
Your obedient servant,
ALFRED R. C. SELWYN.

* Geological Magazine for June, 1872, Vol. IX, No. 6.

JOURNAL AND REPORT

OF

PRELIMINARY EXPLORATIONS

IN

BRITISH COLUMBIA,

BY

MR. ALFRED R. C. SELWYN;

ADDRESSED TO

THE HONORABLE JOSEPH HOWE, M.P.,

SECRETARY OF STATE FOR THE PROVINCES.

GEOLOGICAL SURVEY OFFICE,
MONTREAL, May, 1872.

Sir,—I have the honor to submit the accompanying Journal and Reports of the preliminary Geological Exploration which I made in British Columbia last summer, assisted by Mr. James Richardson of the Geological Staff, in pursuance of the authority conveyed to me by your letter of the 20th June, 1871, as follows:

Geological Exploration in British Columbia. Journal and Reports.

OTTAWA, 20th June, 1871.

Sir,—By my letter of the 9th inst. you were authorized to organize and equip a party for the purpose of making a preliminary Geological Exploration this summer in British Columbia, on the understanding that the cost of the said party should not exceed $6,000 for the year. You were likewise authorized to accompany the party yourself, and you were informed that instructions as to the objects to which your attention should mainly be directed, and as to the portions of British Columbia which it is most desirable you should first examine, would be communicated to you in due course.

Cost of Exploration.

I now have the honor to acknowledge the receipt of your letter of the 10th inst. in reply, in which you point out the desirability of the second on the party being a competent geological observer, accustomed to travel in the woods, and, in an emergency, capable of carrying on the exploration, and taking charge of the party.

Having had this, and the other subjects above referred to, under consideration, the following further instructions are now transmitted for your guidance

Instructions.

You are authorized to take with you to British Columbia, as assistant and second on the party, Mr. James Richardson of the Geological Staff. You will yourself return to Montreal at the close of the season, but should you think it desirable that more extended observations should be made, more particularly of the Coal-fields on the coast, than your own time will admit of, you may make arrangements for Mr. Richardson to continue the investigation till the end of the year, or for such period beyond the date of your own departure as you may consider advisable.

Country to be examined.

As regards the portion of the country which it is most desirable that you should first examine, you must in a great measure be guided by your own judgment, and by information obtained on the spot. But it is of course desirable and important that as much as possible should be ascertained respecting the general geological features and the useful minerals which may be found on and in proximity to the several lines which will be explored by the engineering parties, and on one or other of which the future Pacific railroad will be located.

Photographic illustrations.

With a view to secure accurate illustrations of the physical features of the country and of other objects of interest which may be met with during the exploration, you are authorized to make arrangements with Mr. Notman, of Montreal, for a photographic artist to accompany the expedition, on the understanding that he is paid and equipped by Mr. Notman; his travelling expenses only being paid by the Government. Of these, one half will, in accordance with your arrangement with the engineer in chief, Mr. Fleming, be made chargeable to the Pacific Railroad Exploration Fund and the other to the appropriation for geological purposes in British Columbia. Considering the lengthened experience both of yourself and of Mr. Richardson in explorations of the kind you are now undertaking, it is not thought necessary to instruct you more particularly as to the various subjects in addition to those appertaining especially to geology, to which your attention should be directed, such as the nature of the soil, the vegetation, the quality and kind of timber, the distribution of plants and animals, the character of the climate, &c., &c., on all of which interesting and valuable information may no doubt be gathered.

Subjects to which attention should be directed.

Route.

You will proceed as early as possible, via San Francisco, to Victoria. There you will engage men and secure all necessary supplies and equipment. And you will place yourself in communication with the gentlemen named in the margin,* who have been instructed by Mr. Fleming to afford you all the assistance and information in their power, with a view to facilitate and promote the special object of your exploration, and from whom you will likewise ascertain all particulars respecting the routes on which operations will be conducted.

* Mr. John Trutch; Mr. Walter Moberly; Mr. R. McLennan; Mr. George Watt, Commissary and Paymaster.

Return route

It is presumed that you will return to Canada via San Francisco; but should you think it advisable with a view to scientific objects or from any other cause, that you should cross the Rocky Mountains and return by the valley of the Saskatchewan, you are at liberty to do so. In the event of your returning by the latter route, it is desirable that you should obtain as much information as time and circumstances will permit in reference to the Coal deposits on the Saskatchewan, and also to the Gold-fields supposed to exist on the eastern slope of the Rocky Mountains, and more particularly near the sources of the head waters of the North Saskatchewan.

I have the honor to be,
Sir,
Your Obedient Servant,
(Signed) JOSEPH HOWE,
Secretary of State for the Provinces.

ALFRED R. C. SELWYN, Esq.,
Director Geological Survey,
Montreal.

Our departure from Montreal was unfortunately deferred till too late in the season; and the unexpected delays we were subjected to on the journey to Victoria, with the further unavoidable delay there and at Kamloops, occasioned by the difficulty experienced in procuring men and the necessary supplies and equipment for the expedition, and likewise in making arrangements for their transport, together with the obstructions subsequently encountered in penetrating the dense and pathless forest and jungle which prevail almost unbroken, except by swamps and rivers, for more than 150 miles on the line of route travelled from Kamloops to the Leather Pass in the Rocky mountains, are causes which, I regret to say, have combined with others to render the result of our exploration less than might reasonably be expected, and than I had myself anticipated. The general knowledge, however, which the season's operations have enabled us to acquire of the physical character of the country, the distribution in it of the various formations, the facilities for travel in the several districts, and of other minor matters will prove valuable in prosecuting the more extended and detailed investigations which I hope the Geological Survey will be able to accomplish in future seasons in this interesting though little known Province of the Dominion.

Difficulty experienced in procuring men, supplies and equipment.

The facts which have been ascertained relating to the geological structure and mineral resources of the country, though comparatively few, and scattered over a region of between five hundred and six hundred miles in length,—therefore necessarily at present disconnected,—are some of them new and exceedingly interesting, and when followed out will, I believe,

Facts relating to the Geological structure and mineral resources of the country.

throw much light on the age of the crystalline rocks, and on the geological distribution of gold in North-western America, as well as of the productive Coal-fields, and of the many other valuable minerals which are known to be widely distributed throughout the country, but which require to be located, and their actual extent and workable value accurately determined. The collections which were made during the expedition contain a number of interesting specimens of rocks and fossils from the different formations; but for the purpose of study, and for the accurate determination of their relations, larger and more complete collections will be required, some of which we shall be able to secure next season. To the zeal and perseverance, often under the most unfavorable circumstances, of Messrs. Baltzly and Hammond, of Mr. Notman's staff, are due the very beautiful and interesting photographic illustrations of the route from Yale to the Leather Pass, a complete set of which, comprising 36 views 8 × 10 and 84 stereoscopic views, is transmitted herewith.

Collections of rocks and fossils.

Photographs.

Journal of Expedition.

We left Montreal on the afternoon of the 26th June, and reached San Francisco, without accident or delay, on the 3rd July. From information before leaving Canada, we supposed that the steamer for Victoria would not leave San Francisco till the 5th July; on our arrival there we found however, much to our disappointment, that she had sailed a few hours before, and that fourteen or fifteen days would elapse before the departure of the next steamer for Victoria. Under these circumstances, I thought it advisable to proceed by a steamer which would leave on the 6th for Portland in Oregon, whence, I was informed, we would find no difficulty in reaching Victoria, either by steamer direct, or overland, via Olympia, and Puget Sound; the latter route involving a journey of about ninety miles by stage from Monticello on the Cowlitz River to Olympia situated at the head of Puget Sound. We accordingly left San Francisco for Portland on the 6th July. On Sunday the 9th we reached Astoria, at the mouth of the Columbia River, and, on Monday evening the 10th, arrived at Portland, situated on the Willamette River, twelve miles above its junction with the Columbia, and one hundred miles above Astoria. Here we were destined to be again disappointed and delayed. There was no certainty when a steamer would leave for Victoria, and it therefore became necessary to arrange for proceeding via Olympia. The steamer thence to Victoria, calling at the various settlements on Puget Sound, leaves on Mondays and Thursdays only, at 4 a. m., and as the trip by river steamer from Portland to Monticello, and thence by stage, would occupy the greater part of three days, it was impossible to catch the following Thursday's steamer; we therefore remained at Portland till Thursday,

Departure from Montreal.

San Francisco to Portland in Oregon.

Puget Sound.

and reached Olympia by the route above named on the afternoon of Sunday the 10th July; arriving in Victoria per steamer North Pacific on the following Monday at 8 p. m., having been three weeks on the journey from Montreal. The officers mentioned in your letter of instructions, connected with the Pacific Railroad Exploration Survey, who preceded us from Canada, had not left Victoria when we arrived there, and were still occupied perfecting their arrangements, purchasing supplies and hiring men. I immediately placed myself in communication with Mr. Walter Moberly and Mr. McClennan, and having carefully considered the several routes which they informed me were to be examined by the Engineering parties, I deemed it best to select for our operations the one which was to be followed by Mr. McClennan, from Kamloops up the North branch of the Thompson River to Tête Jaune Cache on the upper Fraser, and thence through the Leather Pass to Jasper House; hoping to be able to return by a route which was to be explored and opened from Richfield on the Cariboo gold-field to Tête Jaune Cache, by another of the railroad survey parties under Mr. Mahood. This route appeared to offer a much wider and more promising field for geological investigations than that which was to be followed by Mr. Walter Moberly, from Hope on the Fraser via Similkameen, Fort Colville, the Kootenay River and the Columbia to Howse Pass; as well as facilities for returning later in the season, afforded by the waggon-road 378 miles in length from Cariboo to Yale. I was further influenced in making this selection by the fact that a considerable part of the latter route had already been explored by the geologist attached to the British and North American Boundary Commission, as well as by Dr. James Hector, in connection with Capt. Palliser's exploration of the passes of the Rocky Mountains, and other portions of the British territory in North-west America, extending over four years, from 1857 to 1860; whereas the geological features on the former had never before been reported on or examined.

Arrival at Victoria.

Selection of route.

Previous Explorations.

Outfit.

As we had brought no camp equipments with us from Canada, everything of this nature had to be purchased before leaving Victoria, as well as the provisions, which would be required from the time we left the waggon-road between Yale and Cariboo, until our return to it at the close of the season.

System of transport.

Beyond the limits of the waggon-road the system of transport, except upon the lakes, where boats or canoes can sometimes be hired, is almost entirely confined to "packing;" either Indians, mules, or horses being used. An Indian load is about 100 lbs., that of a horse about 250 lbs., and for a mule from 250 lbs. to 400 lbs. Indians are therefore not often employed when the quantity of material exceeds a few hundred pounds, or the road to be travelled is passable for horses or mules. Our material amounted to about 3,600 lbs., and therefore fifteen horses were required to transport it.

These we were informed we should find no difficulty in purchasing at Kamloops.

Our preparations in Victoria were completed on Monday, 24th July, and the next morning we embarked on board the steamer Enterprise for New Westminster, situated at the mouth of the Fraser River, and ninety-five miles from Victoria, and arrived there the same evening at 6 p. m., our party, consisting of Mr. James Richardson of the Geological Staff, Mr. Baltzly, photographic artist, Mr. Hammond, assistant, and James Deans, hired in Victoria as general assistant. Early the following morning we started in the stern-wheel river steamer Lillooet for Yale, ninety miles above New Westminster, and at the head of navigation on the Fraser. For about fifty miles, or to the mouth of Harrison River, there is not much current, but thence to Yale the rise is very rapid, and the current so strong that the steamer frequently could not make more than from three to four miles an hour. At 9 p. m., we reached Hope, twelve miles below Yale. Here the party under Mr. Walter Moberly, with their supplies, were landed, to commence next morning, by the passage of the Hope Mountain, nearly 6,000 feet above the sea, their journey of 450 miles to Howse Pass, in the Rocky Mountains.

Embark for New Westminster.

Hope.

The intricacy of the channel, and the strength of the current made it impossible for the steamer to proceed up the river with safety after dark, and we therefore lay moored to the bank till daylight, when a fresh start was made, and Yale reached at 8 a. m. on Thursday the 27th July. A dense fog had hung upon the hills since daybreak, and, shortly after our arrival, it commenced raining heavily. Towards the afternoon, the weather having partially cleared up, Mr. Baltzly availed himself of the opportunity to secure some photographic views. I spent the greater part of the day in endeavoring to find some means of transport. Barnard's stage-waggons were already all engaged for the conveyance of the supplies for the railroad survey parties, and neither teams nor pack-animals were to be had. I was therefore obliged to be satisfied with a promise from Mr. Barnard to forward our supplies and equipment as soon as he could secure teams. In the meantime, not wishing to remain in Yale, I engaged four Indian packers at one dollar *per diem* each, to carry the photographic apparatus, a couple of tents, and some blankets and provisions; and at seven a. m., on the 28th July, we started on foot for Lytton, fifty-seven miles above Yale.

Yale.

Hire Indian packers.

For the purpose of fixing our geological observations, Mr. Richardson paced and took compass bearings along the road. At 4 p.m. we reached the suspension bridge, thirteen miles from Yale, by which the waggon-road crosses to the left bank of the Fraser, and here we made our first camp in British Columbia, on the only level space to be found by the roadside, about 100 yards from the east end of the bridge. The next morning we

First camp in British Columbia.

started at seven. Toward mid-day it became intensely hot, and two of our Indians showed signs of distress; they had to halt frequently to rest,

Boston Bar. and did not make more than two miles an hour. Boston Bar, twenty-six miles from Yale, one of the road-side inns which occur at intervals of seven or eight miles, was reached at one p.m. The thermometer then stood at 80° in the shade and at 105° in the sun. The two Indians were now completely knocked up, and declined to proceed. The chief of the party, however, after a considerable time spent in discussion with his friends, at length informed us that he could procure a horse that would carry the packs, which would enable us to travel faster, and that we were not to pay him more than we had agreed upon at Yale. We gladly consented to this arrangement; the horse, or Indian pony, was brought out, the packs arranged and lashed on a very primitive kind of pack-saddle, and our

Butchers Flat. march resumed. At 7 p.m. we camped at Butchers Flat, thirty-one and a half miles from Yale, on the edge of a dry, stony, gravel terrace, thinly clothed with pine trees, and sloping at an angle of thirty-two degrees down to the swift and turbid waters of the Fraser from about 100 feet above it.

30*th July*.—To-day being Sunday we did not move camp. In the afternoon I ascended the hills to the east. At 3 p.m. at the camp the barometer registered 29.14 and the thermometer 99° in the shade. At the highest point to which I ascended the barometer reading was 26.87, the horizontal distance, east of the camp, being probably not more than two and a half miles. On the opposite side of the river the hills rise even more abruptly to heights where snow lies in patches, apparently, throughout the year, being probably not less than 7,000 feet above the sea.

31*st July*.—4 a.m., barometer 29.27, thermometer 67°. Starting at 6.30 a.m. we reached the Mountain House (Boothroyd's) at 8.15., five miles from our camp on Butchers Flat. The road rises rapidly the greater part of the distance, the barometer reading at Boothroyd's being 28.32. Thence to the Forty-two Mile House, six miles further, is a descent nearly equal to the previous rise, the barometer at the latter registering 29.22. Two miles more brought us to the summit

Jackass Mountain. of Jackass Mountain, barometer 28.64. This is the most elevated part of the road between Yale and Lytton, where we arrived at 6 p.m., tired and foot-sore, having walked 27 miles, over a very rough and dusty road, the temperature throughout the day being between 70° and 90° Fahrenheit.

1*st August* was passed in fruitless endeavors to hire fresh Indians or other means of transport. None could be procured, and it seemed uncertain when we should be able to continue our journey. The following morning, however, I learnt that one of Barnard's stage-waggons, which had taken up supplies for the railroad survey parties, had arrived at Lytton

during the night, on its return to Yale. I at once telegraphed a request to Mr. Barnard that he would instruct the driver, instead of continuing his journey to Yale, to take our party on to Cache Creek. This he consented to, and the same evening we reached Spence's Bridge, formerly Cook's Ferry, twenty-three miles from Lytton up the valley of the Thompson, having stopped at some interesting points to take photographs, and to examine the rocks.

Waggon-road between Lytton and Spence's Bridge.

The waggon-road between Lytton and Spence's Bridge has been laid out in such a manner as to make it apparently unnecessarily hilly and circuitous. It follows the left bank of the Thompson, in some places at a considerable distance removed, and several hundred feet above the water, while in others it is close on the margin of the river, and only a few feet above it. The old trail seems to be more direct, and to offer better gradients, though perhaps involving a greater amount of cutting and grading. This part of the valley is narrow, and very precipitous, especially on the west side, where the rocks rise in almost perpendicular cliffs from the edge of the water to a height of eight hundred or a thousand feet, presenting magnificent sections of the stratification. Approaching Spence's Bridge a marked change occurs in the character of the country. The hills are lower and less precipitous, better grassed, and less thickly timbered. The quality of the soil is greatly improved, and there are considerable areas of cultivable land. Along the valley of the Fraser and the Thompson to Spence's Bridge there is scarcely any land suitable for farms, and that which is capable of cultivation for gardens occurs only in very limited patches, either on the gravel terraces, or on the narrow alluvial flats which occasionally border the river. The largest, if not the only farm under cultivation between the points above named, is that of the Messrs. Boothroyd, at the Mountain House, where there are a few hundred acres of tolerably level land with a light sandy loam soil. From below Hope to Lytton, the character of the valley of the Fraser, and of that of its tributary the Thompson, is little else than a deep gorge or cavity cut obliquely through the eastern flank of the Cascade Mountains, which rise on both sides in precipitous ridges almost from the water's edge to heights of from 2,000 to 7,000 feet. These ridges are for the most part pretty thickly clothed with varieties of pine and fir. Except an occasional birch, no hard wood timber trees were observed. Occasionally, for considerable distances, narrow gravel terraces border the river, and, where they occur, the level surface of the terrace has been taken advantage of in constructing the road. From its often passing from the level of one terrace, to that of a higher or lower one, many short steep pitches occur, and as numerous steep transverse gullies and ravines have been scooped in the terraces by the brooks and storm waters from the hills, the curves and windings in the road, to preserve a tolerably level course, are correspondingly numerous, and sometimes occur to such an

Spence's Bridge.

Soil.

Valley of the Fraser from Hope to Lytton.

Timber.

Gravel terraces

extent as nearly to double the direct distances. In some places, as at China Bluff, below Boston Bar, and at Jackass Mountain, the road has been cut for many miles out of the almost perpendicular walls of rock, or carried round them on strongly constructed timber scaffolding, supported ted on the projecting ledges ; the river foaming and eddying along in its rocky bed, sometimes as much as 800 feet below. At Spence's Bridge, the Thompson is 213 yards wide, with a powerful and rapid current. The bridge is a not very substantial wooden structure, by which the waggon-road crosses to the west, or right bank, about one mile below the confluence of the Nicola River. The waters of Nicola Lake empty through this stream, and it likewise drains a large section of country, lying to the eastward of Lytton and southward from Kamloops, which is stated to be one of the finest grazing and farming districts in British Columbia. I had not an opportunity of visiting the Nicola valley, but a part of it, where a seam of coal has been discovered, was examined by Mr. Richardson. Country of a similar character borders the road for the greater part of the eighty-three miles between Spence's Bridge and Fort Kamloops. The soil is of the richest description, and there are already in this district quite a number of large and well cultivated farms.

Nicola River.

Coal.

Rich soil.

Cache Creek. Cache Creek, which we reached on the 3rd August, is thirty-three miles from Spence's Bridge and 110 miles from Yale. The settlement consists of the ordinary road-side inn and store combined, a blacksmith's shop and some Indian huts. It is situated on the Bonaparte River, about five miles above its junction with the Thompson, which it reaches by an impassable wall-sided canon, cut apparently by its own waters, through the gravel terrace deposits of the main valley. From Cache Creek a branch road has been constructed twenty-three miles to Savona's Ferry, where we arrived on the 5th August. This is the eastern terminus of the waggon-road, and is situated at the out-flow of the Thompson River from Kamloops Lake.

Savona's Ferry.

A few years ago the Hudson Bay Company built a fine and commodious stern-wheel steamboat at Kamloops, which ran for some time from the terminus of the road above mentioned, through Kamloops Lake and up the South Thompson River, to the eastern end of Great Shushwap Lake, a distance of 115 miles. This vessel is now lying idle opposite the Post at Kamloops, and the only means of transport eastward from Savona's, at present, is either by small open boats and canoes, or by pack-horses on the trails which run up the valley on either side of the lake.

Kamloops. Kamloops is a few miles up the river, at the east end of the lake, twenty-three miles distant from Savona's Ferry, and opposite the junction of the north and south branches of the Thompson. This was the final starting point for the parties which were to explore the Leather Pass in the Rocky Mountains, and the Eagle Pass through the Gold Range, from Shushwap Lake to the Columbia River. Here the pack trains had to be

organized, and the supplies concentrated. I arrived at Kamloops on the 6th of August, with Mr. Walter Moberly, having left Savona's Ferry the previous evening in a small canoe with two Indians. On the 9th of August the other members of our party reached Kamloops, but our supplies were still on the road, and did not arrive for several days; while from the difficulties met with in purchasing the required number of pack-animals and their equipments, and in hiring men, we were not able to complete our preparations until the 18th of August. On the 19th we commenced our journey to the Rocky Mountains. Arrival at Kamloops.

During our stay at Kamloops, from the 9th to the 18th of August, the greater part of my own time was occupied in attending to the preparations above referred to. A few geological observations were, however, made in the neighborhood, both by Mr. Richardson and myself, and Mr. Baltzly secured a number of excellent and characteristic photographs of the scenery.

With a view to secure information over as large an extent of the country as possible, in the short time at our disposal, I considered it advisable to separate from Mr. Richardson at Kamloops, and while I turned my attention to the valley of the North Thompson and the Leather Pass, that he should make independent explorations, first of a part of the South Thompson Valley, and afterwards along the line of the waggon-road from Cache Creek to Cariboo, and, later in the season, devote whatever time remained at his disposal to investigations in the coal-fields of Vancouver Island. Plan of Exploration.

Leaving Kamloops, as above stated, on the 19th August, the Geological Survey party consisted of eight persons, with fifteen horses carrying camp equipments, photographic instruments and material, and provisions for rather more than two months, together amounting to about 3,600 lbs. Departure from Kamloops.

The second division of the Railroad Survey parties had preceded us by a few days with a strong party of axe-men to clear the trail, and we therefore anticipated but little difficulty, and expected to be able to travel at an average speed of from eight to ten miles a day.

The valley of the North Thompson for seventy-five miles above Kamloops, or to Clearwater, though rarely reaching a width of two miles between the base of the hills on either side, and probably not averaging more than one mile, nevertheless presents some considerable areas of fine farming land, on flats, either quite open, or lightly timbered with pine and fir, and elevated above the river from five to thirty or forty feet. The finest and most extensive of these, nearly a mile in width, is between fifty and fifty-seven miles above Kamloops, at and below the Red Pine Indian Reserve. On this area, and generally on these flats, the grass is most luxuriant, and in many parts would cut at the rate of from one to two tons of hay to the acre. The last farm up the valley is only fifteen miles above Kamloops, beyond which there are no white settlers. Valley of the North Thompson to Clearwater. Good farming land.

Camp at The Little Fort.

On Thursday, 24th August, we camped on a fine flat above The Little Fort, an old and now deserted Hudson Bay Company's trading post, fifty-five miles above Kamloops. At the head of this flat, the first considerable stream from the west joins the North Thompson,issuing from a wide valley trending to the north-west, and which at first appears to be the main valley.

Pass to Lake La Hache.

It affords a pass from the valley of the Thompson to Lake La Hache on the waggon-road, about fifty-five miles distant. The Thompson makes here a sharp short bend to the eastward, and passes in its upward course round the foot of a rocky bluff rising into a high conical shaped hill, which, seen from the south, appears almost to block up the valley; the hills on the east side also closing in upon the river, form a canon

Passage of Assiniboine Bluff.

or gorge for nearly five miles, terminated by the Assiniboine Bluff described in *The North-west Passage by Land* (Milton and Cheadle) p. 310, and which here completely bars the further passage along the river bank. The railroad party had cleared and graded a zig-zag trail up this bluff, so steep and narrow, however, that the horses, even when relieved of their loads, traversed it with considerable difficulty and risk. The rise being, according to barometric observation, about 490 feet in 550 yards. Fortunately, some Indians, who were living on the flat where we camped the previous night, brought their canoes up the river to our aid, and transported our baggage round the base of the bluff, a distance of not more than four hundred yards. Having thus surmounted this obstruction without accident, we proceeded on our way, and at 6 p.m. camped about four miles higher up, on a small low flat on the edge of the river, covered with coarse grass, bushes and burnt timber, and which appeared to have been flooded quite recently. A thunder storm had been approaching for some hours, and before we got our tents pitched heavy rain commenced falling; the barometer registering at 9 p.m., 28.63.

26th August.—Started at 6 a. m., closely following the bank of the river, the grass and bushes very wet from the rain which fell last night. On

Overtake pack-trains.

Thursday evening we overtook one of the pack-trains which had started from Kamloops several days in advance, and this morning, at three and a-half miles from our camp we passed another, already ten or eleven days on the road. Here the hills again closed on the river, and the trail became very bad, continuing so for the next eight miles. Steep pitches, rocky sidings, thick timber and boggy springs, and the path so narrow that the horses could not pass one another. At four p. m., eleven miles from our last night's camp, the three pack-trains, numbering some fifty or sixty animals, arrived at a spot where the precipitous character of the hills on the east bank, rising almost perpendicularly from the edge of the water, made it necessary to cross to the opposite side. At this point, one mile above the junction of Clearwater, the North Thompson is nearly three hundred yards wide, with a deep channel, and a powerful, rapid current. And now a busy

and exciting scene commenced. One by one the animals were led forward to a small space which had been cleared on the brink of the river, and divested of their loading and saddles. These were transferred, some into a small boat which had been sent up the river from Kamloops, and some into Indian canoes, and ferried, load after load, to the opposite shore. This work finished, the animals in three separate bands, with their respective bell-horses leading, were, after much yelling, pelting and vociferating by the packers and their Indian assistants, forced into the water, and at once struck out for the opposite bank. Some of them, apparently accustomed to the work, made a straight course, while others abandoned themselves to the current and were carried a long distance down the stream, narrowly escaping a watery grave. By dusk, animals and cargo were all safely landed, and our tents pitched about one hundred feet above the water on a narrow gravel and sand terrace, up the steep face of which a zig-zag path had been graded only a few hours before our arrival. Crossing of the North Thompson at Clearwater.

Sunday, 27*th August*.—We did not move camp. Towards dusk rain commenced falling, and continued during the night.

Monday, 28*th August*.—To-day we travelled only six miles and a half, and camped at mid-day on the left bank of Raft River, about one mile above its confluence with the Thompson, on a well grassed flat, pretty thickly covered with willow and alder bushes. Raft River is a fine clear stream, from two to three feet deep, and about 150 yards wide; at about a mile above our camp it issues from a rocky gorge, making several picturesque cascades in its course towards the flat. The advance party under Mr. McClennan had left this camp in the morning. In the afternoon I rode ahead and overtook them at thirteen miles, within two miles of where the river resumes its north and south course. From Clearwater upwards, the general course of the river, for rather more than twenty miles, is a few degrees to the south of east. I returned to our camp at Raft River the same night, and on the following day, 29th August, we camped on the ground where I had left the advance party the previous evening. Raft River. Cascades.

30*th August*.—A little rain fell during the night, and at daybreak the hills were hidden in fog. Five of our horses were missing this morning. After hunting for them for sometime through the wet scrub, I found four, and drove them into camp; leaving the men to find the one still missing, I went on to examine the trail, and, at nine and a half miles, overtook Mr. McClennan and the clearing party, grading and clearing the path up a steep gravel bench. In the last nine and a half miles a great deal of similar work had been done, and a large amount of clearing of logs and brush had been necessary to make the road passable for the pack-trains. Horses missing. Overtake clearing party.

As far as our camp of the 29th August, the country had been tolerably open, and our progress satisfactory, but thenceforward obstructions and difficulties of all kinds increased rapidly. Including two Sundays, on which Slow progress.

the geological party did not move camp, we had been twelve days on the road from Kamloops, and had travelled ninety-five miles. To day we made nine and three-quarter miles, and camped on a gravel bench on the margin of the river, about one hundred feet above the water, and about three-quarters of a mile below the junction of Mad River; barometric observations making the height here about 1,550 feet above the sea.

Mad River.

31*st August*.—Started early, and after crossing Mad River, about five chains above its confluence with the Thompson, soon overtook the railroad party, all hands hard at work, clearing the track and grading the steep banks which had to be traversed. At about five miles and three-quarters above Mad River, after having crossed several small creeks, we came to a small stream, on the other side of which the obscure path we had been following through the forest apparently ended, or was lost in an open grassy flat, which our Indian guide told us was known as "The Little Paddock" and that on it was the last good feed for many miles up the valley. Having spent nearly an hour here, in searching in every direction for the *blazed* trees marking the continuation of the trail, we at length found them in the thick forest on the hill, on the far side of the flat. We then proceeded, clearing the road for a little less than two miles further, when we struck another strong shallow brook from the left. Beyond this the forest became so thick, and was so encumbered with fallen timber, that the task of cutting a road through it in any reasonable time seemed almost hopeless. Our Indian guide now informed us that there was a good trail over the mountains, starting from the right bank of Mad River, always used by the Indians when travelling with horses to Jasper House, in order to avoid the rocks and canons which he said were now immediately in front of us, and extended up the river for not less than twenty miles, and which it would be impossible for us to pass without crossing and re-crossing the river, at least three times; this it was impossible to do without canoes, and we therefore decided to retrace our steps to Mad River. Having come to this decision, we returned to the "Little Paddock" and encamped. The flat here is about 300 yards wide, and extends up the creek on a bearing N. 56° W. for a considerable distance. It is pretty thickly covered with bushes and clumps of willow, alder, hazel and elder, with a few scattered poplar and pine trees. The soil is a rich, dark, sandy loam, and is well covered with grass between the bushes. The course up the main valley is N. 71° E. magnetic.

The Little Paddock.

Thick forest and fallen timber.

Decide to retrace our steps to Mad River.

Tuesday, 1*st September*.—5.30 a.m., barometer 28.10. Started at seven a.m., and at 10 a.m. re-crossed Mad River, and commenced the ascent of the mountains. The only evidence of any trail or path except that which we made ourselves, was an occasional *blazed* tree; the ascent was very steep, the forest thick and as much as ever encumbered with fallen timber. At one and one-half miles up, the barometer reading

Commence the ascent of the Mountains.

was 26.87, indicating a rise in that distance of about 1,150 feet. As there was a small spring and fair picking for the horses, we encamped here, the axe-men continuing to clear the trail ahead.

Saturday, 2nd September.—Started at 8 a.m., and paced 3,200 yards up trail, taking bearings; passed the clearing party, and went ahead with McClennan for about two and a half miles, *blazing* the trail to guide the axe-men. Found the country getting worse, much clearing required, and often very boggy. The men had opened the trail for about three and a half miles from camp. Decided on working to-morrow to try and cut through to the good grass which was said to be ahead, and which the animals, already beginning to show the effects of hard work and bad feed, were much in need of. The risk of losing them in the thickly timbered and badly grassed country we were now in, and of the snow coming before all the supplies could be brought over this monntain road, made it absolutely necessary that no time should be lost. The barometer reading this evening at 3,200 yards up the trail was 25.72, and at camp below at 9 p.m., 26.80, indicating a rise of about 1,000 feet.

Difficult country.

Animals beginning to shew the effects of hard work and bad feed.

Sunday, 3rd September.—6 A.M., barometer 26.93. At 7.30 I went ahead with the axe party, leaving instructions for our camp to follow on Monday morning. At five miles and 380 yards we emerged from the forest into a small alpine prairie, and camped at 3.30 p.m., beside a clear mountain brook, which we had crossed lower down and followed up for about 1,000 yards; barometer 24.17, shewing a rise from camp of about 2,610 feet. At 4 p.m., commenced raining and rained all night.

4th September.—6 a.m., Barometer 24.05. Cold and foggy. I went ahead two miles with the axe party, clearing and marking the trail, then returned to last night's camp of second party, and paced forward two and three-quarter miles. Our train arrived at 4 o'clock. Several small mountain lakes were passed to day, and a large glacier was seen in the mountains to the east, on the other side of the Thompson valley; 9 p.m., barometer 23.75.

Glacier.

Tuesday, 5th September.—Started early, and at five hundred yards forward reached the water-shed to the north; barometer 23.72, indicating the highest elevation yet reached. Till about mid-day we travelled in a nearly north course over swampy and moss-covered meadows, along a rather flat water-shed crossing the heads of the eastern waters. We then turned more easterly, and descended a steep, thickly wooded hill, full of springs, which made the ground even more soft and boggy than it was in the meadows on the summit. At about four miles and three-quarters from our camp we overtook the clearing party, and owing to the numerous soft places, which had to be logged or covered with branches before the pack animals could cross them with safety, only about three and one-half miles of trail were cleared to-day, and this evening we were all camped within half a mile of each other.

Height of land reached.

Swampy meadows.

The following morning, Wednesday, the 6th September, I went ahead for about two miles through rather thick forest, when the country again opened into long meadows, bordered and separated from each other by woods and narrow belts of timber. An old Indian winter-camp was passed here, the trees around it all chopped off at about eight to nine feet from the ground, indicating the depth of snow. The branches of the trees are very short and much bent downwards, the tops often little better than bare poles. The grass on the meadows, which all partake more or less of the character of swamps, was already brown from the effects of frost, and afforded poor nourishment for the horses, after working hard throughout the day. The nights are cold and generally frosty. To-day we travelled five miles, and camped about 4 p. m. on the border of a stream, running partly from a chain of small lakes, and partly from the low wooded hills and swamps to the westward. This, we imagined, was the source of Mad River. 9 p.m., barometer 24.06. (See photograph No. 69,964).

Indian winter-camp.

Source of Mad River.

Thursday, 7*th September*.—A sharp frost last night; ice on the pools, and the grass all frozen stiff. 7 a.m., barometer 24.17. Several horses missing, having strayed into the woods where the frost is less severe than on the open meadows. Crossing the stream, a short distance above our camp, our course was nearly north magnetic, along the east side of two lakes emptying into it, the first nine hundred yards, and the second one thousand and fifty yards in length, with an interval of five hundred and seventy yards, the average breadth being less than one-quarter of a mile, Seven hundred and eighty yards further a flat water-shed was reached, (barometer 24.07,) falling towards another small lake, 1,050 yards beyond which, on a small brook, was the last night's camp of the clearing party. At 9 a.m., barometer 24.27. Following down the right bank of this brook, we came, at 900 yards, to a fine grassy meadow, trending E. 20° N. and W. 20° S., four hundred yards wide, sloping rather steeply from both sides down to a strong stream running through the centre of the meadow, on a course W. 25° S., and which we thought, from its course, must be one of the main sources of Raft River. We travelled nearly five miles further on a general northerly course, passing over undulating forest country, with occasional rocky ridges interspersed with small swampy meadows. At about one and a half miles beyond the Raft River meadow, we passed a height of land, barometer 23.91, being a rise of more than two hundred feet from our last night's camp. Thence there was a gradual, though not constant, descent to our camp, nearly three miles and a half further. This evening the railroad and geological parties, and the three pack-trains, are all camped together in rather thick forest, as usual interspersed with open swampy meadows.

Source of Raft River.

Friday, 8*th September*.—Barometer at camp 8 a.m.,25.06; cold and clear. Sharp frost last night,and the horses all looked very miserable. The axe-party

Sharp frost.

started early, clearing the trail on a north-north-westerly course. I followed at ten a.m., pacing and taking bearings. At 2,400 yards crossed a strong brook in a deep, narrow gulley, falling to the N. E.; barometer in the bed 24.77, and on the bank 24.73. A steep, thickly-timbered range was now in front, and the trail was taken up it, the hill rising on the right involving a course, as I thought, too much to the westward. In a distance of 2,700 yards we had ascended more than seven hundred feet, the barometer registering 23.93, and at 800 yards further we found ourselves on open, grassy hills, barometer 23.80, overlooking a large, deep valley to the north, while beyond were steep rocky ranges of snow-clad mountains. We were now nearly 1,000 feet above our camp of last night, and not less than 5,700 feet above sea level. The valley in front of us we supposed to be that of Blue River, the first large tributary of the Thompson, above the canons of Murchison's Rapids, to avoid which we had come over the mountains. As we had to cross Blue River at its junction with the Thompson, it was now necessary to seek the shortest and best route to that point. We accordingly turned east, descending about 150 feet on to a flat swampy saddle, from which the water ran north down a narrow gulley towards Blue River valley, and on the other side into a small lake, and thence southerly towards a stream which we had crossed this morning. As there was no certainty of finding good feed further on, we considered it advisable to make our camp here. The clearing party, however, went ahead to clear the trail down the gulley above mentioned, returning to this camp in the evening. None of the pack-trains had yet arrived, and while looking round to find a dry camping ground, I discovered marks which had been put up by an Indian hunter who had passed us several days before, and had promised our guide that he would *blaze* some trees and put up marks at this point, to indicate the direction we ought to follow. From these it appeared that our course lay altogether to the eastward of that taken down the gulley by the clearing party. Ascending a small hill about three-quarters of a mile north-east of the camp, we obtained a magnificent view of the surrounding country from north-east to north, north-west and west. In the latter direction, at about fifteen miles distant, a large sized lake was observed, lying apparently towards the head of the valley, which we supposed to be that of Blue River. The apparent distance and the direction of the lake would, however, place it very close to the valley of Clearwater River, into which it may perhaps discharge. The beautiful views of the Selkirk Mountains, though they fail to do justice to the reality, still afford a good idea of the grandly picturesque character of the scenery, and the rugged outline of the ice and snow-covered peaks, as seen from this point.

Open grassy hills.

Valley of Blue River.

Find marks shewing the direction of the trail.

Fine view.

Large lake.

Views of the Selkirk Mountains.

9th September.—Barometer at camp, 6 a.m., 23.99. This morning the clearing party started in the direction indicated by the marks found last evening, the course lying about N.E. magnetic. After crossing the heads of sev-

Descent to the Valley of the Thompson.

eral small brooks, all running to the left, through grassy and boggy gullies, we soon entered the thick forest, the trail falling rapidly towards the valley of the Thompson. The scrub and the fallen timber were so thick, and the descent in places so steep, that after working hard all day, we only cleared 9,400 yards. We were now in a thick forest of large timber, hemlock, spruce, fir and cedar; no grass anywhere, the ground thickly covered with moss. The clearing party camped here, and some of the cargo was also brought on and deposited. I returned up the mountain, and the animals were all sent back for feed, as there was not a blade of grass in the forest below. On this account I sent back instructions in the morning for our party not to move. At the camp of the clearing party, the barometer stood at 26.27, and at our camp, at 9 p.m., 24.35; indicating a difference of about 1,900 feet in a distance by the trail of 6,400 yards, and nearly half of this fall was in the last 1,400 yards, the barometer rising in that distance from 25.03 to 26.02.

Frosty weather.

Sunday, 10*th September*, 6 a.m.—Barometer 24.35. A sharp white frost last night. Fine bright day, cloudless sky. Did not move camp; the animals are enjoying themselves in the good feed and bright sunshine. We are now 143½ miles from Kamloops, and have been twenty-two days on the road, thus averaging only six and a half miles a day throughout, and since commencing the traverse of the mountain only three and five-eighths miles per day.

11*th September*.—6:30 a.m., barometer 24.32. Fine clear frosty morning; started at 8 a.m., with two men to repair bad places on the trail down the mountain. At noon reached camp of clearing party; sent the men back, and went on till I overtook the axe party. Trail bearing too much to the eastward. At 3,774 yards crossed a small creek running eastward in a flat-bottomed gulley, with steep banks of reddish sand. A short distance beyond this we came to the edge of another flat-bottomed gulley, too wide to be bridged, and too boggy for the horses to traverse. As it was late in the day, we returned to the small creek we had just crossed and camped. 9. p.m., barometer 27.32; probably about 2,400 feet above the sea, and about 2,700 feet below our last camp.

12*th September*.—6 a.m., barometer 27.47. At 8.30 a.m. started to look

Swampy ground.

for the best course to avoid the swampy ground which stopped our progress last evening. In about half a mile came upon a small creek, at its junction with the Thompson, with soft muddy banks, but with very little water. This creek issues from large swampy meadows, covered with coarse long grass, and bordered by thick willow scrub. These meadows extend a considerable distance up the valley, and the latter apparently branches in several directions, and must receive the waters of a number of the small brooks which we crossed yesterday on the descent from the mountain, much of their water being absorbed in the swampy flats. In order to get

the pack-trains safely over this creek, a substantial bridge had to be erected. This work, and clearing the trail to a suitable camping ground, about one-quarter of a mile beyond the bridge, occupied the whole afternoon. At dusk all the pack-trains arrived and camped. We named this Wild-goose Creek camp, from the circumstance of a number of wild-geese frequenting the swampy meadows above mentioned. 9 p.m. barometer 27.46, about ten feet above the river. Wild-goose Creek camp.

13*th September*.—The whole party occupied to-day clearing and grading the trail, partly through thick forest encumbered with huge fallen trees and dense under-growth, or along steep hill sides, on which the old forest had been burnt, and was replaced by a growth of sapling spruce, pine and cotton-wood from five to twenty feet high, so thick as to form, in some places, an almost impenetrable wall on either side of the narrow path which we cleared through it. At 4,125 yards from Wild-goose Creek camp, we came to the base of a steep rocky hill, descending abruptly to the water's edge, and extending for 474 yards to the crossing of Blue river, about 130 yards above its confluence with the Thompson.

Thursday 14*th September*.—6 a.m., barometer at Wild-goose Creek camp 27.52; heavy rain. All hands at work to-day clearing and grading the trail round Blue River bluff. Blue River bluff.

15*th September*.—Trail round bluff finished, and cleared 3,078 yards beyond Blue River. Heavy rain in the afternoon; very wet in the scrub. Did not return to our camp on Wild-goose Creek this evening.

16*th Saturday*.—Cleared 3,490 yards, crossing two small creeks, both of which had to be bridged, and passed a large tributary coming in on the opposite side from the east, and which, from the turbid character of its water, we named Muddy River. Heavy rain fell this evening, lasting from four to eight p.m., and making everything wet and uncomfortable. I had not moved our camp from Wild-goose creek, as there was better feed there for the horses than any we had met with beyond. 9 p.m., barometer at camp 27.32.

17*th*, *Sunday*.—Did not move camp. 6 a.m., barometer 27.50; 2 p.m. 27.52; 9 p.m. 27.57.

18*th*, *Monday*.—6 a.m., barometer 27.61. At 9 a.m. left Wild-goose creek, where our camp had been stationed since Tuesday 12th, and travelled a little more than four and one-quarter miles to the camping ground, from which the clearing party had started this morning. This camp is due west, magnetic, from the valley from which issues Muddy River. Our progress during the past week has been most unsatisfactory, it having taken five days to make only four and a quarter miles of trail, the whole of it being through dense forests, alternating with boggy creeks and steep sideling hills. The country becomes more difficult as we proceed, and there is now no chance of our being able to reach Jasper House this season. We have only six weeks provisions left, on a much reduced scale. Unsatisfactory progress. Short rations.

Sunday, 24*th September*.—Canoe camp, 6 a.m., barometer 26.64; cold and clear. During the past week we have only made seven and a half miles. The autumnal rains seem to have set in, and the leaves are falling rapidly. Wednesday, Thursday and Friday, it rained almost incessantly, and snowed on the hills; every one wet and uncomfortable, and the animals suffering severely from cold, wet nights and want of food. Barometer 9 p. m., 27.52. The snow on the hills has melted a good deal to-day, and there has been a light breeze from the north. The absence of wind along the valley, even enough to shake the wet off the bushes and trees, is very remarkable. Indeed, since leaving Kamloops, we have experienced nothing approaching a breeze, either in the valley or crossing the mountain.

Autumnal rains.

Snow on the hills.

Absence of wind.

25*th September*.—6 a. m., barometer 27.51. Started at 8.45 a. m.; at 10.30 it commenced raining and rained incessantly to 9 p.m. Moved camp to-day to end of trail, 12,030 yards, a little more than six and three-quarter miles. This camp is about one-quarter of a mile from the river, and from fifty to sixty feet above it. At 7,593 yards above Canoe camp, we crossed a river from the left, which, when full, must be a powerful torrent. It has several channels and a wide stony bed. Now the water is only about twenty feet wide and eighteen inches deep. Many of the pebbles and boulders in its bed are of a white coarsely-crystalline limestone —we therefore named it Limestone River—with others of gneiss, mica schist and quartz. The banks are everywhere low and flat.

Limestone River.

26*th September*.—6 a. m., barometer 27.26. Fine day. Did not move camp; all hands clearing trail, made 3,624 yards. Forest thicker than ever. 9 p. m., barometer 27.00; at 9.15 commenced raining.

27*th September*.—6 a. m., barometer 27.01. At 6,745 yards overtook clearing party, and cleared 916 yards further. At 4.30 p. m., camped in a thick willow scrub on river bank. Train arrived at 5 p. m.; only a few light showers to-day; passed a fine waterfall on the opposite side of the river; weather too dull for photography.

Fine waterfall.

28*th September*.—6 a.m., barometer 27.21; foggy and showery. Started at 8.30, and worked clearing trail till 4 p. m. Cleared 3,260 yards, and returned to camp. Mr. Baltzly went down the river to take photographs of waterfall; weather too dull. At 9 p. m., barometer 27.37.

30*th September*.—6 a. m., barometer 27.41. Our train which was sent back yesterday to assist in bringing up supplies for the railroad survey party did not return last night, and we shall not be able to move camp to-day. Took the canoe up the river to 1,300 yards above Slaughter Camp, then returned to camp by trail, 9 p. m., barometer 27.47. Train returned at dusk.

Reach Slaughter Camp.

1*st October*.—Fine morning; 6 a. m., barometer 27.60. Started at 10 a. m., and left instructions for camp to follow. Paced from where we left canoe last evening 6,570 yards forward, to where I overtook clearing party grading the trail along a thickly timbered siding, sloping steeply

to the water's edge. As there was no prospect of the trail being completed before dark, I turned back to meet our train, and camped at 5 p. m. on a sandy flat at the edge of the water, along which the trail passed, to avoid a large swamp immediately to the rear, around the border of which our starving animals were able to find a little coarse grass. To-day, wanting to go a short distance off the trail, I tied the horse I was leading to a tree, and laid my note book, with some loose sheets of paper, on which were notes of the past three days, and a rough sketch of the river from below Garnet-creek Falls camp, on a mossy bank at the foot of the tree. When I returned the book was pushed off the bank, and the sheets of paper had disappeared. After searching a long time for them in vain, I concluded that the horse must have eaten them. To test this I offered him a blank page from the book, which he at once greedily devoured, thus fully confirming my suspicions. 9 a. m., barometer 27.62. 10 p. m. raining steadily.

Horse eats my notes.

2nd October.—6 a. m., barometer 27.54. Rained all night and still raining. Paced from bluff where I turned back yesterday 3,630 yards to the North West Fork where I found the railroad party encamped, the men all busy clearing and grading the trail ahead round a steep bluff, to reach the crossing place. We are now opposite the Island in the river described, page 273, *North West Passage by Land*, (Milton and Cheadle), to avoid which we ought to cross lower down, near the junction of the Albreda Lake tributary, which we have to follow up. The main river, or north-west branch, here has three channels, forming a small and a large island. It has been raining all day, and the river is rising fast. 9 p. m., barometer 27.44. A good deal of thunder in the distance.

Heavy rain.

3rd October.—Wet all night, and still raining. 6 a.m. barometer 27.21. Decided to move back and to make the crossing below the islands. Heavy rain all day, with thunder and lightning; clearing the trail up the opposite bank to the junction of the Albreda Lake branch. One of our Indians returned to-day to our Sunday night's camp, to try to get two horses back which had crossed the river there with their packs. For this purpose, he made a small raft, and succeeded in getting the horses, but could not bring the packs across, the raft being unmanageable in the swift current; will have to go down again to-morrow with a canoe. This afternoon we found a fine bark canoe *cached*, belonging, we supposed, to some Indian who is hunting in the mountains. It will be very useful in crossing our cargo. We also found the tree and inscription referring to the guide, André Cardinal, *North-West Passage by Land*, p. 271. 9 p.m., barometer 27.21.

Find bark canoe.

4th October.—6 a.m., barometer 27.48. Fine morning. One of our horses was dead this morning. Last evening all the animals were driven over the river on to the island, as there was no feed for them around our

One of our horses dies.

camp, and this one was swept by the current against a steep part of the bank, and was so long in the water that he got chilled, and was unable to recover. He was already quite knocked up and useless, being barely able to carry an empty saddle. At 9.30 I started, with our Indian guide and a half-breed, down the river in the bark canoe found yesterday, to get the cargo above mentioned. In one hour and twenty minutes we had got it all safely across, and it then took us four hours hard work, poling, paddling and tracking, often up to the middle in the water, to get back to our camp at the crossing. Our train—ten horses—went back to-day to help bring up railroad supplies from our last Sunday's camp: rest of party clearing trail, and helping to build large canoe to take cargo over.

Crossing the North-west branch of the Thompson.

5th October.—6 a.m., barometer 27.47. After breakfast we lashed our two canoes together, and commenced crossing the supplies, camp equipage, etc., of the whole party. At 11 a.m. everything was safely across to the east bank, following which, for 460 yards, we came to the junction of the North or Albreda Lake branch, which we were able to ford without unloading the horses, and after recording the date of our crossing on trees, along side that of André Cardinal, we proceeded, following the right bank of this branch for 2,715 yards, when we camped. Day tolerably fine; only a few showers; fog low on the mountains; road swampy and bad; no feed for the horses.

Indian grave, and cotton-wood canoe.

Friday, 6th October.—6 a.m., barometer 27.25; showery. Worked all day clearing trail. At 300 yards above our camp we found a newly made grave and a good cotton-wood canoe. We made 4,550 yards to-day, and camped at 4.30 p.m. on the edge of a swampy flat covered with long, withered grass, and, in some places, by a recent deposit of sand and silt, brought down from the neighboring hills by storm waters. Our pack-train did not come up this evening, the horses having all strayed back to the crossing.

7th October.—6 a.m., barometer 27.17. Started at 7 a.m. and made 5,500 yards. At 3,139 yards, after having crossed three streams coming from the north-westward, and passed a high gravel terrace about 200 feet above the river, we crossed to the east bank, just above a steep rocky gorge; thence, following that bank pretty closely for 2,361 yards further, we camped at 5 p.m. at the confluence of a strong stream, about 50 links wide, coming in from the eastward. 9 p.m., barometer 27.08. The railroad party camped 540 yards further, at the confluence of another strong stream, likewise coming from the hills to the eastward.

Sunday, 8th October.—Did not move camp. We found to-day that the main stream also turned to the eastward, a short distance beyond our camp. It had all the appearance of a mountain torrent fed by glacier water. We therefore decided to cross it, and to seek for the trail more towards the west side of the valley. At a short distance we struck a

stream of quite a different character, evidently fed by swamp water, and full of pools and beaver dams. This we concluded must be the Albreda Lake branch, and accordingly determined to follow it to-morrow. As there was no improvement in the character of the country, and no prospect of our making more rapid progress through the interminable succession of swamps, bogs, and brush, I decided to start early on Monday, with one horse and an Indian, and make a push for Tête Jaune Cache, to ascertain, as quickly as possible, whether the party from Cariboo, under Mr. Mahood, had arrived there, and whether we would be able to return by their trail. It was also very important to ascertain whether we could find grass for our animals. They were daily getting weaker, and without improved feed it was evident they would soon all perish.

Albreda Lake branch of the Thompson.

9th October.—Started at 8.30 a.m. with La Rue, and one pack-horse, carrying blankets, a tarpaulin, and provisions for four days. We followed up the east bank of the stream found yesterday, and after crossing two long, open, swampy meadows, came into burnt forest. Here the old *blazed* trees were nearly all destroyed by fires, and it was very difficult to find the trail. It runs mostly along gravel benches and steep, rocky side-hills, and through occasional belts of young, unburnt, spruce forest. The stream is left a considerable distance to the west, running through swampy flats, and forming long lake-like expansions, the uppermost of which is Albreda Lake. At 2.30 p.m we gained the summit opposite Albreda Lake, and, a little further to the right, a considerable valley running into the hills on the west, its upward course being about S. 20° W. magnetic. A short distance further we observed below us, on the left, a strong stream running to West 28° North magnetic. This was also very nearly the course we had been following up the valley from our camp of the 7th and 8th October, the position of which was marked by a precipitous gap in the range to the east of it, distinctly visible from where we now were. A short distance further we descended to the level of the stream, which is about one chain wide, and from eighteen inches to two feet deep; fine clear water running swiftly over a sandy and gravelly bed, and bordered by flats covered with bushes and abundance of good feed, consisting chiefly of rather coarse grass and a species of vetch. Not knowing whether we should find grass further on, and our horse being much in want of a good feed, we encamped on the edge of the stream at 3.30 p.m. Barometer 27.04. I thought we had travelled about eight miles; subsequent pacing, however, proved the distance to be rather more than eleven miles.

Start with one horse and Indian guide, La Rue, for Tête Jaune Cache.

Swampy meadows and burnt forest.

Albreda Lake.

10th October.—6 a.m., barometer 27.02. Fine; slight frost. Started at 7 a.m., course down the valley W. 12° N. At 8 a.m., we observed, a short distance ahead, the smoke of a camp fire, which turned out to be that of a Shushwap Indian family, consisting of the man, his wife and two

Meet an Indian family.

children. They were on a hunting expedition, but did not appear to have been very successful. Their camp was at the base of a pile of rocks in which they had made a *cache*. This had been broken into by a wolverine, and, a few minutes before our arrival, the Indian had succeeded in shooting the depredator. Through the medium of my Indian, I learnt that we could reach Tête Jaune Cache on the following day, that the trail was good and that there was plenty of grass at intervals. We are now in a tolerably open country, rocky hills on the right, flanked by irregular gravel benches intersected by gullies ; young poplars and spruce, in patches ; nearly all the old timber burnt. Our Indian acquaintance accompanied us for about three miles down the valley to show us the trail, which, to us, was almost invisible, but which he seemed to follow through a maze of fallen logs, as easily as I could a cleared waggon-road. (See *Photographs* Nos. 69,991 and 69,992, the first looking towards Albreda Lake and down the valley of the Thompson.) At 10 a.m., having shewn us the general direction we had to follow, he left us to examine his beaver traps on the river below. I gave him a note which he promised to deliver the same evening to Mr. McClennan, informing him of the improved character of the country, and that I expected to reach Tête Jaune Cache the following day. This, I knew, would be most welcome news to him, and to the whole party.

Cache broken into by a wolverine.

Gravel benches.

We were now travelling along the edge of one of the gravel benches, which was about thirty feet above the river flat, and thinly clothed with small pine trees and aspen, the trail gradually trending to the right, and across the shoulders of the benches which here encircle the base of the fine massive mountain, in which the snow-clad range dividing the waters of the North Thompson from those of Canoe River and the Columbia terminates. At noon we had reached, by several steep ascents, the level of the highest terrace, the barometer on the top reading 26.77 ; course forward north magnetic, across a wide sandy flat, openly timbered with pine, to the top of the descent from the terrace towards Canoe River, which latter we reached at 1. 30 p. m. ; barometer at the water's edge 27.22, showing the terrace from which we had just descended to be nearly four hundred feet above the river. The crossing of Canoe River was not as formidable an operation as we had expected from the account given of it in the *North-West Passage by Land*, (pages 265 and 266). We were fortunate in finding the water low, and only about two hundred feet wide. From the flat near the crossing the following bearings were taken :—

Mount Thompson.

Canoe River.

Camp River valley and Albreda Lake..S. 15° E.
Mount Thompson. .....E. 40° S.
Down centre Canoe River valley.. ....E. 18° 20′ S.
On Peak above Fraser River pass.....W. 46° 25′ N.
On the Cache.....W. 36° 35′ N. 15 miles.

Down Selwyn River valley.....W. 26° 20′ N. across Cranberry Lake.
On Three-peak Mountain, head of Canoe River valley.....S. 36° 30′ W. 8-10 miles.

Leaving the left bank of Canoe River the trail crosses a small ana-branch, then about seventy or eighty yards of boggy ground, thickly timbered, and then ascends by a steep zig-zag path, about one hundred feet, to a terrace or wide sandy plateau, which it crosses in a very indirect course towards the south-west corner of Cranberry Lake. This plateau is mostly covered with a thick growth of young pine and spruce. All the old timber is burnt, and either remains standing as bare poles, or lies cumbering and obstructing the trail. Following for about one mile along the west shore of Cranberry Lake through thick poplar, willow and alder coppice, we encamped at 4 p. m., having been travelling nine hours. From the edge of the terrace above Canoe River there is, I think, a slight fall towards the lake, the southern end of which is likewise bounded by an abrupt terrace slope of from thirty to fifty feet high, and there is probably not more than fifteen or twenty feet difference between the level of the water of Canoe River and that of Cranberry Lake; the latter being the higher. The lake has probably an extreme length of about two and a half or three miles, by a breadth in the west part of about one mile. It appears to be very shallow; there are several small islands in it, and over nearly the whole of it the tops of reeds or swamp grass stand above the water. The soil on the west side of the lake is either peaty or a sandy loam, and is thickly covered with a species of light feathery grass, standing about one foot high, and now quite brown and useless as fodder. The character and appearance of the lake and the surrounding country are well shown in the photographs 70,009 and 70,010. On the lake shore, 5 p. m., barometer 27.05, quite a strong breeze blowing, the first we have experienced since leaving Kamloops; 10 p.m., raining slightly; 1 a.m., calm, barometer 27.19; rain ceased.

Cranberry Lake

Difference of level of Canoe River and Cranberry Lake.

Soil.

11*th October*.—Started at 7.15 a.m., barometer 27.23, sharp frost, clear and calm, course along lake shore N. W. magnetic. At 8 a.m. we missed the trail, and came upon a small clear stream, three feet deep, and about four feet wide, flowing to the north-west. This brook, which from the abundant and recent traces of beaver along its banks, I named Beaver Brook, is the outlet of Cranberry Lake. After searching here nearly two hours for the trail, we at length discovered it on the east side of Beaver Brook, bearing towards the base of the eastern hills. In about one and one-half miles, through pine forest, generally tolerably open and good travelling, the ground quite flat and the soil very poor and sandy, we came to the bank of a rapid mountain stream flowing over a stony bed; the water now only from forty to fifty feet wide, and about eighteen inches deep. This stream has all the appearance of being sometimes quite a

Beaver Brook the outlet of Cranberry Lake.

Selwyn River.

large river. Mr. McClennan subsequently named it Selwyn River. A short distance below where we crossed it, it makes a sharp bend to the north-west, and receiving the waters of Cranberry Lake, through Beaver Brook, passes down the valley to join the Fraser below Tête Jaune Cache, about thirteen miles from Cranberry Lake. The four photographs, Nos. 70,001 to 70,004 show the character of the scenery at Selwyn River looking down the valley. In No. 70,004, on the right, is a cliff section of a gravel terrace with the river at its base. Leaving Selwyn River the trail keeps a tolerably direct course down the valley and along the base of the hills on the east side, crossing, in the first five or six miles, several small brooks, after which no running water was met with till we reached the Fraser at the Cache; after crossing it, Selwyn River is not again seen from the trail, as its course is quite on the opposite side of the valley, which is here nearly three miles wide. For three or four miles before reaching the Cache, the ground along which the trail passes, consists almost entirely of sandy ridges, thinly clothed with pine, and also a few spruce, juniper, and small blue-berry bushes; while, here and there, are tufts of dry wiry grass. We reached the banks of the Fraser at 3.45 p. m., and were much disappointed at finding no traces of the party from Cariboo; barometer 27.25.

Scenery at Selwyn River.

Sandy pine-ridges.

Tête Jaune Cache: no traces of the party from Cariboo.

12*th October*.—6 a.m., barometer 27.85. Fine, clear and calm. A very sharp frost last night. From the Cache, Mount Thompson bears E. 31° S.: down the valley of the Fraser the bearing is W. 10° N., and up it into the pass E. 33° N. Having satisfied myself that the Cariboo party had not reached the Cache, and that I should have to return by the valley of the Thompson, I determined to hasten back to meet Mr. McClennan, in order that he might decide on the best course to pursue for the safety of his pack-trains, and have an opportunity of stopping them at Canoe River, where the grass was much better than at the Cache. Starting at 7.40 a.m., we reached Selwyn River at noon, and Canoe River at 3.30 p.m., and crossing it, we camped on the right bank. 8.30 p.m., barometer 27.46.

13*th October*.—6 a.m., barometer 27.10. Strong breeze from south-east. Started at 7.45, and at 10 a.m. met railroad party, grading the trail up the steep terrace bank which I had passed at noon, on the 10th, a little less than four miles from Canoe River crossing. In the photographic view, No. 70,006, the terraces over which the trail passes from Canoe River to reach the valley of Camp River are well seen, immediately below the gap in the mountains, out of which one of the main sources of Camp River issues. The four views, 70,007, 70,005, 70,006, 70,008, if placed together from left to right, give very nearly a panoramic view of the ranges as seen from the bank above Canoe River crossing; on the left, looking down the valley of Canoe River; on the right, up it to the glaciers from which it takes its rise, but which in the picture are hidden by clouds; and, in the left centre, the grand and massive Mount Thompson, with the wooded

Panoramic view from the terrace above Canoe River crossing.

terraces mantling round its base. In the two first, to the left, Canoe River is seen in the foreground, and in the third, a lagoon, the river being hidden by the trees in the foreground. This evening, we encamped on the edge of this lagoon, and the half-starved mules and horses seemed to appreciate the good feed in which they now found themselves.

Saturday, 14*th October*.—It is now evidently quite impossible to reach Jasper House this season, and as the country where we now are appears to be better suited for winter quarters than either Cranberry Lake or Tête Jaune Cache, Mr. McClennan has selected for this purpose a sheltered site on the banks of Camp River, about four or five miles above its junction with Canoe River, and where there is abundance of timber, both for fuel, and for the construction of the buildings, which will be required for the men and for storing the supplies. Thence along the course of the valley to where we are now encamped, there appears also to be sufficient grass for the support of such of the animals as we may be compelled to leave here for the winter. To-day we determined to make an attempt to reach the summit of the Leather Pass, with a small party lightly equipped, and decided to start early on Monday morning. From the information given us by the Shushwap Indian, whom I met on the 10th, and who had remained with our party, we calculated on being able to reach the summit of the pass, and to return to our camp on Canoe River in eight days; the Indian who knew the country acting as our guide.

Winter quarters.

Leather Pass.

16*th October*.—6 a.m., barometer 27.48; fine, clear and frosty; thermometer during the night 26°. Mr. McClennan, myself, Mr. Baltzly, Mr. Hammond, with Philip our Indian packer, LaRue, the Indian who accompanied me to the Cache, and the Shushwap Indian, "Jem," as guide, constituted our party for the pass. We started at 8 a.m., and reaching Tête Jaune Cache at 4 p.m., crossed the Fraser and encamped on the right bank. The water at the crossing place was only about three chains wide, and from three to four feet deep, running with a rapid current over a bed of large rounded stones. In some places the banks are rocky and precipitous, showing fine exposures of the strata. The river when full would be at least five chains wide, and from six to seven feet deep. 4 p.m., barometer 27.42.

Exposures of strata.

17*th October*.—6 a.m., barometer 27.40; thermometer 28°; fine and clear. Started at 7.45 a.m., trail very bad; stones, rocks, logs and boggy creeks. We only travelled about seven miles to-day, having had to ford the river five times between Tête Jaune Cache and the Grand Forks, and to travel most of the distance along the now dry bed of the river. At 4 p.m., we camped about one and one-half miles above the Forks, in a thick forest of fir, spruce and pine, on the edge of a small meadow, on which we thought our horses would be able to get some grass. The old trail, at one time used by the Hudson Bay Company, runs up the right bank of the

river to the Forks, but, owing to fires, is now so encumbered with logs as to be quite impassable for horses. If the water in the Fraser had not been very low we should have been obliged to turn back.

18th October.—6 a.m., barometer 27.09; thermometer 37°. This morning the horses could not be found. Some of them had strayed back to below the Forks, and were not all found till near noon. Our course forward up the valley was E. 10° N. magnetic. To-day, to get round the "Lofty cliff of crumbling slate," mentioned by Milton and Cheadle, (*North West Passage by Land*, page 251,) we had to climb the mountain by a dangerous zig-zag path, to an elevation of probably more than nine hundred feet above the river: at the highest point reached the barometer reading was 26.10. By a somewhat less abrupt descent we again reached the level of the benches, and at 4.30 p.m., camped about 70 or 80 feet above the river, on a burnt hill side, thickly covered with fallen logs, and so steep that we had to dig and level the ground, to make flat spaces of sufficient size to accommodate our tents. 8 p.m., barometer 26.42.

Lofty cliff of crumbling slate

19th October.—6 a.m., barometer 26.37; fine and clear, slight frost. Started at 7.40 a.m., and at noon crossed a considerable mountain stream from the left, and about one mile further we came to a large open meadow, on which earlier in the season, and before the frost had withered it, the grass must have been very fine. This is probably the open space mentioned in the *North West Passage by Land*, page 249. We stopped here for lunch, and to let our horses have a good feed. About three miles further, after crossing some very swampy ground, and following for some distance along the margin of the river, over slippery rocks and stones below high-water level, we suddenly found ourselves on the shore of Moose Lake, a short distance above its outlet. It was only 2 p.m., but our guide said we must camp here, as we should find no grass further up the lake, which appeared to be from eight to ten miles in length. The stereoscopic views No. 69,994. to 69,997. were taken at this camp. We have travelled about eight miles to-day. The forest is chiefly of spruce, balsam, and hemlock, and rarely cedar. To-night we had some tea made of the "Hudson Bay tea-plant," *Ledum latifolium*. It was better than cold water, but a little sugar would have made it more palatable. 9 p.m. barometer 25.91. The extreme width of Moose Lake is not more than two miles, and at our camp only about 300 yards.

Moose Lake.

Forest trees.

20th October.—6a.m., barometer 26.05; thermometer 40°. Course up the lake E. 3° S. Bearing down the valley W. 3° S. The greater part of the lake shore, especially the upper portion, is a bed of stones and very bad to travel over. There is a little grass here and there, above the stones, and between the forest and high water mark. At times of high water, it would be necessary to travel almost the whole length of the lake in the water, or else clear a road through the forest. At the south end, rocky hills rise

steeply from the water's edge, exhibiting in their upper parts cliffs of apparently horizontally stratified rocks. At 10 a.m. we reached the head of the lake: immediately above it is a large lagoon and swamp, on which there were numbers of wild ducks, the first we had seen since leaving Kamloops. Passing round the north side of this swamp, and following the valley, we crossed at noon a strong stream from the north, probably Moose River, about fifteen yards wide: at 6 p.m. we crossed another about ten or twelve yards wide, strong and rapid, but not more than eight or ten inches deep. From the large rounded stones, and the clean washed gravel in their beds, these streams are evidently subject to heavy floods. On the south side of the valley between these streams, our guide pointed out a steep pass through the mountains, which he tells us is used occasionally by the Indians, and leads direct to the valley of Canoe River, not far below our camp. Some Indians had recently crossed it with a band of horses, on their way to Jasper House. We came upon the tracks of their horses shortly after, and from here the trail was cleared and well marked, but very boggy in places. At 2.50. p.m. we camped on the edge of a small swampy meadow, in which we hoped our horses would be able to find something to eat amongst the tall withered grass, with which it was covered. 3 p.m., barometer 25.92. Our guide now tells us we could not reach the head of the pass till to-morrow night. To-day we must have travelled nearly sixteen miles. Rain commenced falling at 2 p.m., and continued to fall heavily the whole evening, and through the night.

Cliffs.

Moose River.

Pass to valley of Canoe River.

21*st October*.—6 a.m., barometer 25.97; still raining and the hills all hidden in mist. This morning we decided on retracing our steps, as we had neither tea nor sugar, and barely sufficient bacon and flour left to last us to our camp at Canoe River. At 2 p.m. we reached our camp of the 19th (at the lower end of Moose Lake), barometer 26.04, and at 3.30, and camped on the meadow where we lunched the same day. It has been raining all day, and everything is wet and uncomfortable.

Scarcity of provisions.

22*nd October*.—6 a. m., barometer 21.16. Fine morning. Started at 8. a.m., travelled till 3.30 p.m., and camped on the bank of the Fraser, about one and one-quarter miles below the Forks, where there was a good bed of rushes, which the horses fed on greedily, and apparently relished much more than the frosted grass in the swampy meadows. To-day, coming over the Slate Mountain, one of our horses gave in and we had to leave him on the trail; some of the others are now very weak, and I fear we shall have to abandon them also, before many days elapse. 9 p. m., barometer 26.99.

Slate Mountain.

23*rd October*.—6 a.m., barometer 26.82. Cloudy, mild and inclined to rain; 9 a. m., barometer 26.77. This morning I sent back our Indian guide "Jem," to look for the horse we left behind yesterday, thinking he might be sufficiently recovered to travel. At 10 a. m., Jem returned,

bringing the horse with him, having found him only a short distance from where we left him. At 3.40 p. m., we reached our old camping ground at Tête Jaune Cache, and this evening we again enjoyed the luxury of a cup of tea, having found our tea and sugar lying uninjured, on the trail where it had been left on the morning of the 17th. I also killed six grouse to-day, which were a very welcome addition to our stock of provisions, now reduced to a small quantity of flour only, and the tea and sugar recovered this afternoon. At 3 p.m. rain commenced to fall, and continued in heavy showers up to 9 p.m.; barometer 26.72. Still no signs of the party expected from Cariboo. Mr. Baltzly got one or two views of the hills on both sides of the pass below the Forks, but was not able to get one of the magnificent mountain, Robson's Peak (Milton and Cheadle, page 252), which stands in the angle made by the Frazer Grand Forks, and rises with mural precipices to a height of two or three thousand feet above the river. Yesterday, it was cloudless, and presented a truly splendid picture, while to-day, it has been wreathed in mist and capped with clouds. Our Indian told us that their name for this mountain signified, "The lines in the rocks." The whole face of the mountain, and its various spurs and buttress-like projections in their upper portions, are marked out in horizontal lines, due to the unequal weathering and to the varying colour and texture of the strata, which apparently consist of alternating calcareous and siliceous bands.

Camp at Tête Jaune Cache.

Robson's Peak.

24th October.—6 a.m., barometer 26.86. Started at 8.50 a.m., and reached Selwyn River at 11.30 a. m. We stayed here an hour to take photographs, and reached our camp on Canoe River at 4 p. m. At 9 p.m., barometer 27.20. Thermometer 30°, clear and calm.

Camp on Canoe River.

25th October.—6 a.m., barometer 27.30; thermometer 17°. The coldest night we have yet experienced. Towards mid-day clouds and mist with gusty winds, snowing on the mountains and light rain in the valley. The day spent in preparation for our return journey to Kamloops: shoeing horses, repairing pack saddles, &c., &c. 9 p.m., barometer 27.17; foggy and calm; thermometer 40°.

Preparations for return to Kamloops.

26th October.—6 a.m., barometer 27.15; thermometer 38°. At 9 a.m. we left Canoe River, and at 12.30 reached the encampment of the railroad party, who were to be left here through the winter, under Mr. Green, C.E. They had already, during our absence, completed a large and substantial hut in which the supplies were housed, and another near by, to be used for a dwelling, was almost finished. With good water, abundance of fire-wood, and a well stocked store, there is every prospect of the party being able to pass the winter comfortably, in this far off mountain wilderness. We remained here only long enough to make up some deficiences in our supplies for the return journey, and then proceeded on our way towards the Albreda Lake summit. We were now a party of twelve, the Geological

Winter quarters of railroad party.

Survey party of eight, with Mr. McClennan and three Indians. The latitude of the winter camp is 52° 27′ 15″, magnetic variation 25° 21′, and the elevation probably about 2,760 feet. It is, as already mentioned, situated on Camp River, which issues from the western ranges, and forms one of the principal sources of Canoe River, which it joins about five miles to the northward. At 4 p. m., we camped at about ten miles from the summit; barometer, 4.20 p. m. and at 9 p. m., 26.56. It had been raining slightly since 3 p. m. and at 8 p. m. came on heavily.

Camp River.

27th October.—4 a.m., barometer 26.42. The ground covered to a depth of three inches with snow, which still falls thickly. At 9.40 a.m. reached my camp of Monday, 9th October; barometer 26.37. At 10.10, opposite Albreda Lake, barometer 26.30, and at 5.30 p. m. we reached our camping ground of Saturday and Sunday, 7th and 8th October. It had been snowing all day, and we were all cold and wet. One of our horses knocked up, about two miles from camp, and we had to abandon him. 9 p.m., barometer 26.41, rising; moonlight night, clear, calm and frosty.

Snow.

28th October.—6 a.m., barometer 27.20. Sharp frost, very cold and uncomfortable all night, everything buried in snow, and nothing but twigs for the horses to eat. Started at 9.45 a.m., and reached the crossing at 2.30 p.m.; freezing hard all day. Had to abandon another horse too weak to travel. It will be impossible to take any of our horses further, and we must now build canoes, and descend the river, leaving the horses with the hope they may survive the winter, but which their weak and exhausted state will, I fear, render almost impossible.

Abandoning of horses.

The party which left Canoe River to return to Kamloops, on the same day we left there for the Leather Pass, had built a large *cache* here, (photographs 70,012 and 70,013), in which nearly 4,000 lbs. of flour was deposited. In it we also placed all our horse gear, pack-saddles, blankets, &c. It had been very hastily built, and was by no means secure; all the flour bags were damp, and much of the flour had been wetted, and if left as we found it, would probably have been quite spoiled in a month or two. We therefore set to work to empty the *cache*, and to dry and re-bag the flour. This work, building a large canoe, and making paddles and poles occupied all hands from day-light till dark for the next four days; snowing and freezing nearly all the time.

Conditions of Cache.

Monday, 30*th. October.*—About seven inches of snow fell during the night.

Tuesday, 31st *October.*—Thawing slightly.

1*st. November.*—Snow falling nearly all day. This evening our preparations were all finished, and the following morning, at 9.10 a.m., we embarked in four canoes, the two largest carrying four, and the others two each. At 4 p.m. we camped in a thick willow scrub, wet, cold and uncomfortable. The following morning, 3rd November, starting at 7.20

a.m., we reached Wild-goose Creek camp at noon, and at 2.30 camped on
Murchison's Rapids. a sandy beach at the head of Murchison's Rapids, about five miles further down the river. On our journey up, we had worked hard for twenty-three days to accomplish this distance.

4th November.—6 a.m., barometer 27.25, rising. Started at 8.10 a.m. To-day we had to portage and walk nearly the whole distance, letting the empty canoes down the rapids, one by one, with the aid of long ropes attached to bow and stern. We did not make more than three and a half miles, and encamped at 4.30 p. m., on a narrow rocky beach, about fifty feet above the river. 9 p. m., barometer 27.78; fine and mild, and the snow nearly all melted.

5th November.—6 a. m., barometer 27.85. To-day we have not made
Canoe capsized. more than one mile. In running the first rapid, one of the canoes capsized in the middle of the river, with two of our Indians, who, however, were none the worse for their cold bath. Fortunately nearly every thing had been taken out of the canoe to lighten her, and our losses from the accident were not important. This evening we camped at the upper end of the
Fine Cedars. upper Gate or Canon. 9 p. m., barometer 28·5; clear and frosty. The cedars here are very fine, tall and straight.

6th November.—6 a.m., barometer 28.12; sharp frost, clear and calm. Commenced at 7.30 a.m., portaging canoes; 282 yards to the top of the hill, 170 feet rise, forty yards level and 208 yards down to still water below the Gate. Before dusk we had all the canoes and some of the baggage over.

7th November.—6 a.m., barometer 28.13. At 6.45 commenced packing tents and baggage over portage, and descended the river for about one mile of still water to the head of the rapids, through the second gate or
Porte D Enfer. Porte D'Enfer, (photographs 70,020, 70,025.) Got all the baggage over the portage, about three-quarters of a mile, and camped on the edge of the pool below. 9 p.m., barometer 27.77.

8th November.—6 a.m., barometer 28.12. Slight rain last night, fine and frosty this morning. At 7.30 went back to get our canoes over the portage. By dusk we had all the canoes over, and camped amongst the stones, on the edge of the pool below the Porte D'Enfer canon. The photographs, Nos. 70,014, 70,016, 70,017, 70,019, to 70,023, and 70,025, afford an excellent idea of the character of the scenery of Murchison's Rapids.

9th November.—6 a.m., barometer 28.10; hard frost, very cold in the tents. Started at 8.10 a.m., crossed to the left bank: below the pool more rapids, and we had to lighten the canoes and let them down with ropes: made about two miles and camped at dusk on a stony beach. 9 p.m. barometer 28.05.

10*th November*.—6 a.m., barometer 27.95. Start at 7.20 a.m.; in about one mile, more bad rapids, extending for nearly three-quarters of a mile, obliging us again to lighten the canoes and let them down stream with ropes. At 11 a.m. re-embarked, and made eleven or twelve miles. All still water, often lake-like and very shallow, with a soft sandy bottom. At noon we came to a camp of the party which preceded us down the valley. They had left here on the 5th. At 3.30 p.m. we arrived at their next camp, where we found sundry articles which they had *cached*, probably to relieve their worn out animals. It was very cold to-day in the canoes; ice forming rapidly along the shores, icicles hanging from the canoes and paddles; 9. p. m. barometer 27.71. The banks of the river here are mostly low and sandy, bordered by flats extending back a considerable distance. There is apparently abundance of good grass on these in summer; they are all suitable for cultivation.

Flats suitable for cultivation.

11*th November*.—6 a.m., barometer 27.70, probably indicating snow or rain. The frost was very severe last night, and the ice on the river, floating and fixed, is increasing rapidly. Start at 7.30; in ten minutes came to more rapids, which continued as far as we travelled to-day. At 3.30 we encamped on a gravel bench a few miles above Mad River. At dusk it commenced snowing. 9 p.m. barometer 27.80.

Severe weather.

12*th November*.—6 a.m., barometer 28.00; snowing slightly; about one and a half inches fell last night. At 10.30 a.m, reached the rapid and canon, above the confluence of Mad River; here we had to get the canoes up a very steep hill, and down a much longer and equally steep slope, at the lower end of the portage. While hauling one of our canoes up, the rope broke, and the canoe went down the hill like a sleigh, and shot out into the current, capsized going over the rapids, and passed beneath the ice on the pool below. The largest canoe was so heavy and ice-coated that we were unable to haul it up the hill, and were obliged to abandon it. We had now only two canoes left with which to continue our journey; shortly after dark we had these, and nearly all our baggage over the portage, and we camped, cold, wet and tired, on the left bank of Mad River, at its confluence with the Thompson. Fire-wood was scarce, and there was barely space to pitch our tent, between the steep hill side and the water.

Confluence of Mad River and Thompson.

13*th November*.—Passed a very uncomfortable night. At daybreak commenced portaging our baggage over Mad River to a point lower down, where we could embark. At 10.30 every thing was across, but as our two canoes would not carry all our baggage, we were obliged to *cache* the photographic apparatus, and every thing not indispen sable, and send the canoes down with two Indians in each, the rest of the party following by the trail on foot. We started at 11 a.m. and at 3.30 p.m. reached our camp of the 29th of August, thirteen and one-half miles from Raft River. The snow was from eight to ten inches deep, and walking through it very fatiguing.

Clearwater and Raft River

14*th November*.—6 a.m., barometer 28.10, at water level. At 7.30 started to walk to Clearwater. Snow deeper than yesterday. At one o'clock we reached Raft River, which we had to ford, the water above our knees, and covered with ice not quite thick enough to bear. At 3,30 p.m. we reached Clearwater, after a very fatiguing walk of twenty miles : the canoes had arrived safely about one hour before.

Red Pine Indian Reserve

15*th November*.—Having procured a boat at the depot, we left Clearwater at 8 a.m., and continued our journey down the river. At 3 p.m. we reached the Red Pine Indian Reserve, and camped again in the hut we had occupied on the 23rd August. It was then vacant, but we now found it occupied by an old Indian and all his family. It was a bitterly cold night, and we were glad to share the floor with the Indians and their dogs.

16*th November*.—Started at 8 a.m.; very cold, the ice forming rapidly in the river. At dusk we reached the last *ranche*, fifteen miles above Kamloops, where we arrived the following afternoon, having only once had to cut our way, for about forty yards, through ice, which had formed quite across the river, though often there was only just room for the canoes to pass between the heavy ice-floes which were floating slowly down the stream.

Distance travelled

We found Mr. Tate in charge of the Hudson Bay Company's post, and we thoroughly appreciated the comforts and kind hospitality with which he entertained us. We had been ninety days absent, having travelled 535 miles ; the journey up the valley by land occupying sixty-two days, and the return by water only twenty-eight days.

The following are the distances from Kamloops, measured by pacing along the trail to Canoe River, and thence estimated to the furthest point which we reached in the Leather Pass :—

Distances from Kamloops.

Kamloops to Clearwater		75	miles.	
"	" Raft River	82	"	7
"	" Mad River	105½	"	23½
"	" Blue River	154	"	48½
"	" Crossing at Albreda Lake Branch	186½	"	32½
"	" Canoe River	216½	"	30
"	" Tête Jaune Cache	232½	"	16
"	" Moose Lake	251½	"	19
"	" End of Journey	267½	"	16

Approximate elevations determined by barometric observation, mostly from a series of readings. The figures are probably rather above what the height will prove to be by accurate instrumental measurement :—

Elevations.

Kamloops	1250	feet.
Clearwater	1403	"
Raft River	1410	"
Wild-goose Creek Camp, 3½ miles below Blue River	2214	"
Crossing at junction of Albreda Lake Branch	2370	"
Albreda Lake	3063	"
Canoe River	2484	"

Cranberry Lake	2511	feet.
Tête Jaune Cache	2430	"
Fraser Grand Forks	2889	"
Moose Lake	3600	"
End of Journey near Cowdung Lake	3654	"

We left Kamloops on the 20th of November, and reached Victoria on the 29th. At Yale we found that the ice in the Fraser had stopped the steamboats, and we had to descend the river in a canoe. We finally left Victoria on the 7th of December, and arrived in Montreal on the 26th of the same month. Mr. Richardson left Victoria on the 22nd of December and arrived in Montreal on the 9th. of January. Arrival in Montreal.

Geographical Features.

The boundaries of British Columbia on the main-land are, on the south, the forty-ninth parallel of latitude; on the east, the main chain of the Rocky Mountains; on the north, the fifty seventh parallel of latitude, and the boundary of the United States Territory of Alaska; and on the west, the Pacific Ocean and the Strait of Georgia to the forty-ninth parallel. In the province are now likewise included Vancouver Island, at one time a separate colony, and Queen Charlotte Islands, as well as a number of smaller islands in the Strait of Georgia. A line through the centre of the country, from the south-east corner of the province on the forty-ninth parallel to the boundary of Alaska on Nasse Harbour, is nearly nine hundred miles in length, and the average breadth of the province, from the shores of the Strait of Georgia to the summit of the Rocky Mountains, is about three hundred miles, or an area of about 270,000 square miles. Pemberton, in his *Facts and Figures relating to British Columbia and Vancouver Island* (published in 1860), says the area of British Columbia is about three and a half times as large as Great Britain, while Vancouver Island is about half the size of Ireland, or respectively 311, 517 square miles. Bonndaries of British Columbia. Area.

The main orographical features of this region are the Coast or Cascade Range, the great central hilly plateau or table land, and the Rocky Mountain chain: subordinate to the latter, and more or less parallel with it, are two other belts of mountainous country, the Selkirk Mountains and the Gold Range. All these mountain chains, and likewise the central plateau, have a general north-west and south-east course. The coast or the Cascade Range is the northward extension of the Sierra Nevada; the hilly central plateau bears a similar relation to the great volcanic arid and hilly table land of the state of Nevada; and the Selkirk and Gold Ranges may be paralleled with the Bitter Root Mountains between Montana and Idaho, the Wasatch Mountains in Utah, and other chains which occupy a similar position in relation to the main axis of the Rocky Mountains. Orographical features.

Exclusive of the volcanic cones and craters of Mt. Baker, Mount Hood, Mount Rainier, and others from 10,000 to 15,000 feet high, none of which, Height of Mountains.

however, occur between the Fraser River mouth and Alaska, the highest points of the Cascade Mountains probably do not exceed 7,000 feet. The central plateau has an average elevation of from 1,000 to 3,000 feet. The Selkirk Mountains, especially towards the north, in the vicinity of Cariboo, and about the sources of the North Thompson, have a somewhat greater average elevation than the Cascades, and they likewise appear to contain a greater number of glaciers and of points above the snow line, though their more inland position may perhaps account for this fact, irrespective of their altitude. The highest known summits of the Rocky Mountains are Mt. Murchison, Mount Hooker and Mount Brown, estimated at from 12,000 to 15,000 feet. They have never been ascended, and their geological structure has not, I believe, been ascertained.

Drainage.

Excepting the western slope of the Cascade Mountains, and the extreme northern portions,—the latter drained partly by the Skeena River and partly by Peace River, an affluent of the McKenzie,—the whole of British Columbia is drained by only two great rivers, the Fraser and the Columbia. The former receives all the waters of the Cascade Mountains, the greater part of those of the central plateau, and of the western slope of the Gold Range, while its main eastern sources are on the western flank of the Rocky Mountains, north of the fifty-third parallel of latitude. The principal eastern branch issues from the Leather or Yellow Head Pass: and from its source at the summit of the pass above Cowdung Lake, 3,750 feet above the sea, following the course of the stream to its mouth below New Westminster, is a distance of not less than six hundred and fifty miles. Its main western branch issues from Francois Lake, only a few miles less distant from the mouth, and one degree north of the eastern source in the Leather Pass, giving a fall of a little more than five feet to the mile. There are however many long stretches of almost level water in the upper part of its course, and it is stated to be navigable for steamers, with but few interruptions, from above Quesnel Mouth to near Tête Jaune Cache. At the latter place, in October last, the water was not, where we crossed it, more than four feet deep, and the appearance of the river was not very promising for steamboat navigation. I have not myself seen any part of it between Tête Jaune Cache and Lytton.

Character of upper courses of the Fraser.

The Columbia River drains a much smaller area within the British territory than the Fraser, its waters being chiefly confined to a triangular tract of country, the base of which is the United States boundary along the forty-ninth parallel, and the western side, the 120th meridian as far north as Tête Jaune Cache and the Leather Pass. Canoe River to the north, the Kootenay River to the east, and the Similkameen and Kettle Rivers on the west, are the only important tributaries of the Columbia north of the British boundary. There is a remarkable parallelism in the general course of these two great rivers. From their sources they both

Parallelism in courses of Fraser and Columbia Rivers.

flow in a nearly north-westerly direction for about 180 miles; they then both make a sharp turn, generally known as "The Big Bend," to the south, flowing nearly due south, and almost parallel with each other for 350 miles; the Fraser to Hope and the Columbia to Colville, whence respectively they reach the sea by an almost rectangular bend to the westward. The Fraser is navigable for steamboats for only one hundred miles above its mouth. The navigation of the Columbia from the sea, for more than 300 miles, is interrupted by only two short portages; and above this, with the exception of a few short intervals of impassable rapids, it is navigable nearly to the Boat Encampment, at the junction of Canoe River, 250 miles above Fort Colville, and more than 800 miles above Astoria.

Navigability of the Fraser and Columbia Rivers

Geological Structure.

The rocks in the vicinity of Victoria and Esquimalt were, I believe, examined first in 1858 by Mr. Bauerman, the geologist attached to the British and North American Boundary Commission; and again in 1859 or 1860, by Dr. Hector, who accompanied Captain Palliser, in his exploration of the southern passes of the Rocky Mountains within the British territory. The result of these observations has been published in the Journals of the Geological Society. The geology and mineralogy of Vancouver Island and of portions of British Columbia have also been investigated and described by other authors, among whom are Dr. Forbes, of the Royal Navy, Lieutenants Mayne and Palmer, the Rev. C. Lundin Brown, of Lillooet, Mr. Justice Begbie and Mr. Pemberton. A number of papers and communications have also been published by Dr. Robert Brown, giving the result of his observations extending over four years from 1863 to 1866, during which time Dr. Brown made several scientific explorations in the Island on behalf of the local government, and also extended his observations to portions of the mainland. I have had an opportunity of reading only two of Dr. Brown's papers; one, *On the Physical Characteristics and Geographical Distribution of the Coal-Fields of North-west America* (published in the Transactions of the Geological Society of Edinburgh, 1868-1869), and which contains an excellent description of the Coal-fields of Vancouver Island; and also one, *On the supposed absence of the Northern Drift from the Pacific Slope of the Rocky Mountains.* (American Journal of Science and Arts, November, 1870). I was not able to make any personal examination of the coal-fields in British Columbia, but Mr. Richardson did so, and the detailed result of his observations is embodied in his official Report. The opinion he has formed respecting the value and extent of the coal deposits on Vancouver Island is exceedingly favourable, though perhaps not quite so high as that of Col. Moody, R. E., who when speaking of Nanaimo at a meeting of the Royal Geographical

Explorations of Mr. Bauerman and others.

Coal-fields

Future of Nanaimo.

Society in 1864 said it is destined to be "a Newcastle, a Birmingham, a Glasgow and a Swansea, all in one," while the future of Victoria and Esquimalt he considered as entirely commercial.

The few days I remained in Victoria were almost entirely taken up with the necessary preparations for our contemplated journey to the Rocky Mountains, and I therefore saw but little of the geology of Vancouver Island.

Rocks of Vancouver Island.

In the immediate vicinity of Victoria, and around the shores of the harbours of Victoria and Esquimalt, crystalline diorite and epidotic and greenish fine-grained rocks prevail, associated with massive granitoid, chloritic, feldspathic and hornblendic gneisses, quartzites, and bands of more or less crystalline and silicious grey limestone, also epidotic. Mr. Bauerman mentions the occurrence of serpentine, and dark green sandstones and mica slates, penetrated by crystalline greenstone and syenite; the beds being fused at the lines of contact. We saw no serpentine on Vancouver Island, nor any rocks which I should be disposed to consider as certainly intrusive. Their generally crystalline character is more probably due to metamorphic action on original sedimentary deposits, notwithstanding that often no trace of stratification can now be discerned in them: and this

Fossiliferou limestone

view is strengthened by the very important fact, which, through the labours of Mr. Richardson, we are able to establish, namely, the fossiliferous character of the associated limestones. Though the fossils in these limestones are too fragmentary for specific determination, yet the external forms, as developed by the action of acid on the specimens, leave no doubt of their organic origin. The Vancouver Island limestones do not differ materially from others from the main-land, in some of which we have found well preserved fossils, but which up to the period of our examination were supposed to be equally devoid of organic remains.

I examined several outcrops of the limestones between Victoria and Esquimalt, and also on the west shore of Esquimalt Bay. They are everywhere associated with epidotic and crystalline metamorphic rocks of the nature already described; and which, according to their lithological character and

Huronian and Quebec Group.

general aspect, might pass for strata either of Huronian age, or of that of the altered Quebec Group of Canada. A specimen from the last mentioned locality, supposed to be serpentine, has been analysed by Dr. Hunt. He finds it to contain 54 per cent of silica, and only a small proportion of magnesia, and having the composition of a fine-grained diorite. This rock almost immediately overlies a thick band of limestone, the run of which is nearly magnetic east and west with a high southerly dip. In the paper already referred to by Dr. Brown on the glacial phenomena, he mentions gneissose rocks, crystalline limestones and traps, as being the only rocks seen for long tracts on the north shore of De Fuca Straits; and also says "A great portion of the island is occupied by igneous rocks—chiefly traps

and metamorphic sandstones,—seen in the southern and south-eastern sections." On the Leech River, a tributary of the Sooke River, Dr. Brown first discovered gold, and he states that $100,000 worth was extracted from the stream in less than three months, and that nuggets of forty, fifty, sixty and even seventy and eighty dollars, were not uncommonly found. Gold.

Leech River takes its course along the junction of two classes of rocks which Dr. Brown describes as trap and metamorphic slates; the slate forming the bed of the river, and in many places changing into micaceous sandstone or shale. Numerous quartz veins run in the same direction as the cleavage of the slate. No gold has been found in the creeks on the right bank coming off the trap. Since the first discovery by Dr. Brown, gold has been found in all parts of the island where similar slaty rocks occur; but nowhere, except in the first locality discovered, in paying quantity. There are many fine examples of ice-grooves and scratches on the rocky shores of the island, some of which, near Victoria, are well shewn in the stereoscopic views taken by Mr. Baltzly during our stay there. The direction of the grooves where I observed them was N. 10° to 15° W. magnetic. Dr. Hector states their course to be N. E., and also that they are equally conspicuous on the main-land shores of the Straits of De Fuca. We did not observe any similar markings on the main-land, but our observations did not extend to the coast, or to any part of the western slope of the Cascade Mountains. The course assigned to the glacial grooves by Bauerman, is N. N. W., and S. S. E., very closely coinciding with my own observations of them near Victoria. Mr. Richardson's observations make them S. 27 W. It therefore appears that they occur in two directions nearly at right angles to each other. Glacial action.

Professor J. D. Whitney has stated that a northern drift does not occur in California, and that no evidence of its occurrence has yet been detected on the Pacific coast, as far north as British Columbia and Alaska. This conclusion having been arrived at on the authority of Mr. W. D. Dall, naturalist attached to the Collins Overland Telegraph Company, and who states that though he had carefully examined the country over which he had passed, in Alaska, for glacial indications, he had not found any effects attributable to such agencies; and that no boulders, no scratches or other marks of ice action had been observed by any of his party, though carefully sought for.

Dr. Robert Brown, in the paper before cited, in *Silliman's Journal*, November, 1870, states that there is abundant evidence of glacial action, and of the wide distribution of a true glacial boulder-drift, and quotes Mr. Bauerman in support of his views. Of the existence of ice-grooves on the shore of Vancouver Island there can be no question. Inland, neither Mr. Richardson nor I observed any.

Geological observations on the main-land.

Our geological observations on the main-land commenced on the 28th July, at Yale, the head of steamboat navigation on the Fraser, and for 110 miles, or to Cache Creek, were restricted to one line of traverse and its immediate vicinity. From Cache Creek two lines were examined, the one by Mr. Richardson along the line of the waggon-road to Cariboo, and the other by myself, via Kamloops and the North Thompson River, to Tête Jaune Cache on the Fraser, and thence nearly to the source of the latter, at the head of the Leather Pass, in the Rocky Mountains,—the distances being respectively about 268 and 318 miles from Cache Creek. Thus, only a very small portion of the Province has yet come under our observation, and, therefore, any even general conclusions we may have arrived at respecting the geological structure of the country and the sequence of the various formations, based, as they necessarily are, on so cursory and limited an examination, will probably require considerable modification after further and more detailed examination shall have been made. So far, however, as we at present know them, the rock formations of British Columbia may be grouped under the following divisions, reversing the order of their deposition :—

Grouping of Rocks.

I. *Superficial Deposits.*
II. *Volcanic Series and Coal and Lignite Group of the Main-land; and the Coal-rocks of Vancouver Island.*
III. *Jackass Mountain Conglomerate Group.*
IV. *Upper Cache Creek Group (Marble Canon Limestones.)*
V. *Lower Cache Creek Group.*
VI. *Anderson River and Boston Bar Group, and Upper Rocks of Leather Pass and Moose Lake.*
VII. *Cascade Mountain and Vancouver Island Crystalline Series.*
VIII. *Granite, Gneiss and Mica-schist Series* of North Thompson, Albreda Lake and Tête Jaune Cache, including the micaceous schists of the Cariboo district.

Terraces or Benches.

I. *Superficial Deposits.*—These are chiefly developed in the ancient terraces or benches, which, throughout the country, are wonderfully regular and persistent, occurring from the coast up to elevations of nearly 4,000 feet, in the passes of the Rocky Mountains. They give a marked and peculiar character to the scenery of the river valleys, rising like gigantic stairs to elevations of sometimes more than four hundred feet above the adjoining river or lake. In some places two, three, four and five distinct steps can be seen ; while often they have either become merged into one by subsequent denuding agencies, or else the precipitous character of the side of the valley has altogether prevented their formation. The steps vary greatly in width and in height, the greatest height observed being as much as one hundred feet ; what the greatest width is I have not ascertained ; from one to five chains is not uncommon. In some of the stereo-

scopic views these terraces are well seen, especially in those of Lytton, the north bend of the Thompson and Canoe River.

Recently, February, 1871, Mr. Justice Begbie has brought the subject of the terrace deposits of British Columbia under the notice of the Geographical Society in London. He suggests that they are due to a vast lake, or series of lakes, and that their drainage was connected with an elevation affecting a large mass of the continent, raising at different periods various ridges of hills and mountains, either together or separately, resulting in protruding them through the wide-spread lacustrine formation. Reviewing these suggestions by Mr. Begbie, Professor James Dana remarks, that, if admitted to be lake terraces, the facts would prove that a large part of the continent had been covered with lakes in place of rivers, and just where rivers should have existed, which he says is a view not to be entertained; and he thinks that successive elevations of a portion of the continent a few feet would, by increasing the excavating force of the streams, be sufficient to produce all the results observed. Origin of terraces.

Movements of elevation such as are indicated might, however, produce an exactly opposite effect to that assigned to them by Professor Dana. If the elevation happened to be greater along the coast than inland it might operate in such a manner as to cause the formation of lakes in valleys which were peviously traversed by rapid rivers.

Nearly all the lakes in British Columbia occupy long, narrow depressions in the river valleys, and are, in fact, lake-like expansions of the rivers. There is, I think, no doubt that such lakes were at one time much more extended and more numerous than they now are; and that in many places, as for instance at Lytton, and on the north bend of the Thompson, and at Canoe River crossing, the terraces mark the old margins of these lakes, while in others they doubtless represent only the ordinary flood-flats of the rivers. The removal of the rocky barriers by which these inland waters were confined would result in the formation of such gorges and canons as we now find on the Fraser at Yale, and below Lytton, as well as on the North Thompson at Murchison's Rapids, and on Canoe River below the wide flats at the crossing, and would, without any general movement of elevation, drain off the waters of the lakes, leaving the old shore lines exactly as we now see them, at corresponding heights on both sides of the valleys. Ordinary alluvial river flats do not commonly occur in that manner, but where a flat occurs on one side there is usually a steep bank on the other, and especially is this so along rapid rivers which traverse a mountainous country. If the terraces are due to river action only, the detrital accumulations in which they have been excavated must at one time have filled the valleys to elevations corresponding with the highest terraces, and this implies the existence of broad flat-bottomed valleys, where now there are steep gorges and rocky canons. The filling in of

these valleys must have taken place during a lengthened period of depression of the land, followed by successive movements of elevation during the terrace epoch.

Gold in Lower Fraser Valley.

The gold of the Lower Fraser Valley is apparently all derived from the terrace deposits. Often the workings have been on the upper benches; but the principal "bars," as they are locally termed, are below the highest flood levels, and, as their name indicates, are situated above some rocky bar or barrier in the bed of the river, which has acted like a riffle in arresting the heavier particles of gold. The deposits consist of sand, silt, clay and gravel, mixed with large, more or less water-worn blocks of local rocks, occurring chiefly in the lower portions. The gold is not confined to the layers which rest directly on the bed-rock, but occurs equally rich at several distinct horizons.

The rich "bars" of the Fraser are now supposed to be for the most part exhausted, and have for some time been abandoned by white miners. There seems, however, to be a process continually going on by which the lower bars and flood-flats become replenished with fine gold through the annual floods operating on the slopes of the terraces within their range, and redistributing the gold they contain along the course of the stream.

Indians and Chinese as Gold-washers.

Nearly all the Indians of the Fraser above Yale have now become gold-washers. They return to the same point on the river year after year, at the season of lowest water, to wash the sands, and, it is asserted, can almost always earn for a day's labour from one to two dollars' worth of gold. Besides the Indians there are quite a number of Chinese who make a living in the same way, and appear to have permanently located themselves at intervals all along the banks of the river, where they have built themselves log huts, and often, on the most unpromising-looking places, have made small gardens, in which by dint of carrying soil and water, they succeed in raising fine crops of vegetables, for which they find a ready sale to the teamsters on the waggon-road. The soil of the terraces is generally poor and sandy or stony, but by the aid of irrigation small gardens and fields of a few acres are successfully cultivated, especially on the lower flats which are occasionally flooded. There seems no reason to doubt that the gravel benches or terrace deposits of the Fraser and of the North Thompson, which border these rivers with but few interruptions from Yale to the Leather Pass, as likewise those of many similar valleys in British Columbia,

Hydraulic Mining.

would afford a highly remunerative field for hydraulic gold-washing on a large scale, the only drawback being the unavoidable suspension of operations during the winter.

II. *The Volcanic Series; the Coal and Lignite Group of the Main-land; the Coal rocks of Vancouver Island.*

On the main-land the rocks of this division are, so far as known, confined

Central plateau.

to the central plateau, which, preserving its peculiar geological and phy-

sical features, extends with varying width throughout the country from the forty-ninth parallel, I believe, to Alaska. The valleys of the Fraser and the Thompson intersect it diagonally from north to south. On the Fraser, the south-western edge is about fifty miles above Lillooet, and the north-eastern not far from Quesnel Mouth. On the Thompson, its south-western boundary is about thirteen miles below Spence's Bridge, and its north-eastern about sixty or seventy miles above Kamloops. Between Lillooet and the North Thompson it appears to have a maximum width of only fifty to sixty miles. To the north the great Chilcoten plain forms a part of it, and both there, and in the Okanagan and Similkameen valleys to the south, the width is not less than one hundred miles.

The very few observations we have yet made scarcely justify any attempt to define its geological structure. Probably nearly all the groups enumerated are represented within the area, the older ones especially where the valleys are deeply excavated. It may be described as consisting of a base of more or less crystalline and slaty rocks, much disturbed and dipping at high angles; resting on these unconformably, filling up depressions, and sometimes capping the higher elevations and forming buttress-like hills are the rocks of division II. They consist of a series of comparatively undisturbed and unaltered deposits, partly sedimentary, and probably often of fresh-water origin, and partly volcanic, associated with seams of coal or lignite and plant-bearing beds. Sandstones, shales and conglomerates, of various textures and degrees of hardness, are also met with in the series, and amongst the volcanic accumulations there are columnar basalt, dolerite, cellular lava, and various amygdaloidal, brecciated and fragmental rocks, containing zeolites, calc-spar, opal, chalcedony, agate and quartz in veins and cavities. Copper and silver ores have also been found, but whether they belong to the lower crystalline rocks, or to the newer volcanic period, has not been ascertained. In the corresponding regions of Nevada, according to Mr. Clarence King, silver ores occur in nearly all the formations from the Palæozoic Carboniferous to the Tertiary Volcanic series inclusive.

Character of rocks.

Copper and Silver ores.

I was not able to examine the site of the silver-bearing ledges at the Eureka Silver Mine, near Hope, but was informed that the proprietor of the claim valued it at $300,000. Difficulty of transport, the high price of labour, and the want of the requisite capital have, however, hitherto prevented its development. The mine is situated nine miles south from Hope on the Fraser River, at an elevation of about 6,000 feet above tide water. Messrs. George Dunbar and Thomas Schooley are the proprietors. They state that the vein is from three to twelve feet wide; that a tunnel has been driven on it for 500 feet, and that it can be seen for a thousand feet, on a strike N. E. and S. W., dipping S. E. $< 80°$-$90°$. The specimens for

Eureka Silver Mine.

analysis, (for which see Dr. Hunt's Report,) were taken from a heap of several tons, and were considered a fair average of the whole.

Fossiliferous beds.

On the south side of Kamloops Lake, the volcanic rocks are exhibited in perpendicular escarpments of columnar basalt, and are associated with plant-bearing beds, and fossiliferous shales and sandstones. Dr. Dawson has examined a thin slice of one of the latter, prepared at the museum by Mr. Weston, and he states, "It appears to contain quantities of *Orbuline* and *Globigerine Foraminifera* and sponge spicules. The forms are distorted as if by metamorphism or excessive pressure, and may be Cretaceous." Of the plant remains from the same locality, Dr. Dawson says, "On a few small specimens I observe a Coniferous plant, apparently *Taxodium cuneatum* of Newberry, and also what seems to be a fragment of a Cycadean leaf. I should think these Cretaceous."

Clinton.

Similar rocks, Mr. Richardson states, extend westward to within a few miles of the Bonaparte River. In the vicinity of Clinton, they cross to the west side of the river; alongside the waggon-road, twelve miles above Clinton, a chasm has been excavated through them from 200 to 300 feet deep, and about half a mile wide, which stretches for five or six miles to the southward. From the bottom the sides slope upwards at an angle of about 30° to the base of the vertical cliffs of horizontal volcanic strata, from 100 to 200 feet high, which form the walls of the chasm. The slope below being composed of a fine earth-like deposit, resulting from the disintegration of the debris fallen from the cliff above, and bearing a scanty covering of grass and a few small trees.

From here to the 150 mile house, where a small outcrop is seen, rock exposures are rare; but a few miles above Soda Creek, similar volcanic rocks rise wall-like to a height of several hundred feet, at about one mile from the river. Further on they bound the river valley on both sides, extending sometimes for miles in an unbroken wall, from half a mile to two miles from the river, between which and the base of the cliffs there are rich grassy slopes.

Coal-bearing rocks.

Above Fort Alexander, and at intervals to Quesnel mouth, the coal-bearing rocks crop out along the river, in a horizontal position. Whether they extend beneath the cliffs of horizontally-bedded volcanic rocks, which, as before stated, bound the valley from two to five miles distant, has not been ascertained. At Quesnel Mouth, an interesting section of the coal strata has been exposed by a recent slide. It is in descending order as follows:—

Section at Quesnel Mouth.

	Feet.	In.
Pale grey, yellow, red and black beds, some of a very light compact rock containing thin grass-like stems and in places pieces of coal; others hard	100	0
Grey mud	20	0
Grey sandstone with leaves and stems of plants	1	0
Sand wit. rounded pebbles	25	0

Mud with impure coal	26	0
Drab ferruginous sandstone with leaves and stems of plants, from two inches to	2	0
Impure coal, mixed with earth, stems and leaves of plants. On the top a few trees remain with part of the stems and roots as they grew, both being partly mineralized	10	0
Grey clay	6	0
Total	190	0

Vapour emissions.

The rocks exposed in the upper part of the above section shew marks of having been subjected to considerable heat. About one mile above Quesnel Mouth, smoke and hot vapours have for several years issued from the ground. The residents in the vicinity have erected a hut over the orifice whence the vapours issue, which they use when they wish to enjoy the luxury of a steam bath. A few miles above Fort Alexander, a similar escape of smoke and steam has been observed. In both cases it is supposed to be due to the slow combustion of beds of coal or lignite, which have taken fire, either accidentally from the surface, or more probably by spontaneous ignition. In the geologically somewhat similar regions in Nevada and Idaho, emissions of steam and heated vapours are very common, and can be witnessed in close proximity to the railroad, in many parts of the Humboldt valley.

Plant remains from Quesnel Mouth.

Dr. Dawson has examined the plant remains from Quesnel Mouth. He says, "The prevalent genera seem to be *Quercus* and *Platanus*. There is also a leaf referable to *Pterospermites*, Heer; and possibly an *Acer* and *Populus*. The species seem to be different from those of Vancouver Island, and, I should think, not improbably of Miocene age. Larger and more perfect collections should be made." Slices of the fossil woods collected at Quesnel Mouth have likewise been examined by Dr. Dawson. Some are of Exogenous woods, shewing structure like that of modern poplar, probably *Populus* or *Platanus*; others are of Coniferous wood in the state of Lignite or brown coal. One of these is remarkable for its density, and Dr. Dawson thinks must be heart-wood of a large tree or a knot—the structure is similar to that of Cypress.

"The specimens," Dr. Dawson says, "do not throw much light on the age of the formation, except to strengthen the probability of its being Tertiary. They are different from the woods examined from Vancouver Island, and fossilized in a different manner. In nearly all the specimens the woody cell-walls appear to be in the state of brown coal."

Several miles to the westward from Quesnel Mouth, white wall-like cliffs of these rocks are seen, which, with their associated volcanic strata, apparently stretch far to the north-west, beneath the rich grassy plains of the Chilcoten district.

Coal Rocks of Vancouver Island.

The Vancouver Island Coal rocks are fully described in the Report of Mr. Richardson, and do not therefore require further notice here. Though

apparently of the same age as those in the vicinity of Kamloops, they are not associated with any rocks of volcanic origin, and, I am inclined to think, they are somewhat lower in the series.

III. *Jackass Mountain Conglomerate Group.*—The rocks of this group were first observed on the waggon-road between the fortieth and forty-second mile posts. They consist of hard, close-grained and thick-bedded, greenish sandstones or quartzites, green and black shales, and, above these, massive thick-bedded pebble conglomerates, dipping generally at low angles in various directions: some of the enclosed pebbles are of rocks belonging to the Cache Creek series. At Jackass Mountain the road is built round, or excavated out of vertical cliffs of these conglomerates, at from 800 to 900 feet above the river, into which you can almost drop a stone from the parapet of the road; and at a short distance back they rise into hills, not less than 3,000 feet above the valley, which they occupy to within about five miles from Lytton. Another small area of these rocks was observed by Mr. Richardson, commencing between the 127th and the 128th mile-posts, and extending on each side of the road for about seven miles, after which no rock exposures occur for many miles. The geological position of this group is at present uncertain; no fossils were found in it, but it is supposed to be younger than the Upper Cache Creek group.

Sandstone, shales and conglomerates.

IV. *Upper Cache Creek Group.*—Clinton, or "The Junction," is situated at the junction of the two waggon-roads to Cariboo; the one to the west by the valley of Harrison, Lillooet and Seton lakes, and Lillooet; and the other by the valley of the Fraser and the Thompson. It was on the latter road, between Clinton and Lillooet, that Mr. Richardson first observed this group. The road runs there through a valley, transverse to the strike of the rocks, from one to two miles wide, on either side of which hills rise abruptly from1,000 to 2,000 feet. The base of this group Mr. Richardson supposes to be here, about two miles west of Clinton. The beds have generally a high westerly dip. They consist of a great volume of bluish, dove-colored, and white limestones, often a good marble, interstratified with brown dolomitic limestone, red and green shale, and epidotic and chloritic rocks, with others which closely resemble rocks of the Quebec group in the Eastern Townships of Canada. These rocks occupy the country westward for about six miles. On their strike to the northward they can be easily traced by the eye, from the almost snowy appearance of the limestones, for twenty or thirty miles; and in the opposite direction they can be traced, by the same characters, for ten to twelve miles, to another transverse narrow valley called Marble Canon. A narrow, deep lake, of clear water, occupies the bottom of this canon, the white cliffs of limestone rising on either side of the lake to heights of from 2,000 to 3,000 feet above the water. About half-way up, on the north side, the limestone

Roads to Cariboo.

Limestones, shales, &c.

Marble Canon.

beds stand up in masses which look like detached columns of a diameter of from fifty to one hundred feet, and from three hundred to four hundred feet high, due probably to unequal weathering of the here almost vertical strata.

How far the rocks of this group extend to the southward has not been ascertained. It is not unlikely that in that direction they pass beneath the rocks of the volcanic series which extends westward from Spence's Bridge, on the Thompson, towards the valley of the Fraser.

The only other locality where similar rocks were observed was near the 164th and the 165th mile posts, on the waggon-road, which is very nearly on what appears to be the direction of their strike to the north-westward from Clinton. In both localities the limestones are succeeded by a considerable thickness of black shales, sometimes soft and calcareous, but often hard and flinty. Black shales.

The only fossils discovered in these rocks are in specimens of the limestone from Marble Canon. Of these, Dr. Dawson says, "They contain large Foraminifers of the type of *Loftusia*, but different generically; also other smaller Foraminifers, probably Eocene or Cretaceous." Fossils.

V. *Lower Cache Creek Group.*—The rocks of this group were first met with on the waggon-road, a short distance above Spence's Bridge, and they extend thence along the line of the road to four or five miles above Clinton, where they become covered by rocks belonging to the Volcanic and Coal groups. At Clinton they occupy a breadth of six or seven miles, being overlaid on the west by strata of the Upper Cache Creek group, apparently in conformable succession, and on the east by rocks of the Volcanic series. Between Spence's Bridge and Cache Creek, these rocks can be well studied in cuttings on the road, as well as in the numerous exposures on the adjacent hill sides. They consist of massive beds of grey sub-crystalline limestone (Photograph No. 69,926), black flinty shale in beds of from one to three or four inches thick, chloritic and epidotic rocks with serpentine and soapstone; there are also great thicknesses of crystalline dioritic rocks and porphyritic felsite—a brown compact rock holding small crystals of pinkish feldspar. I also observed bands of brown calcareous and gypsiferous slaty shales or schists. Extent. Characters.

The limestone in one place was found to contain abundance of fossils, which, though in a very fragmentary condition, are sufficiently well preserved to throw some light on the age of the formation, even with the aid of the present small and imperfect collection. The specimens have been carefully worked out with dilute acid, and Mr. Billings, who has examined them, says the fossils from this locality, ten miles above Spence's Bridge, consist principally of the comminuted remains of several species of *Brachiopoda* in a greyish limestone. As they are partially silicified, by treatment with Fossils.

acid we have extracted sufficient material to enable us to recognize the following genera :—

1. *Cyrtina*.....2 *sp.*
2. *Spirifera*.....1 *sp.*
3. *Rhynchonella*.....1 *sp.*

There are also a small *Myalina* and an *Euomphalus* with angular whorls. Although none of the above have been determined specifically, they indicate almost certainly a horizon between the base of the Devonian and the summit of the Permian.

Serpentines. The limestones holding these fossils are so intimately associated and interbedded with the serpentines and other crystalline rocks above described, as to leave no doubt that they all belong to the same series.

Decomposition of rocks. In some places a remarkable amount of decomposition has affected the outcropping edges of the Cache Creek rocks: occasionally this action has extended to a depth of more than twenty feet, as shewn in numerous transverse gulleys cut by the surface waters through the soil and soft earthy material, which is then seen to pass gradually into the solid rock below. In these areas of decomposition, which are often of considerable extent, iron pyrites is largely disseminated in the rocks. On the surface they are characterized by a succession of rather steep mounds or mound-like hills, from fifty to as much as 300 feet high. The soil often presents a curiously parti-colored appearance, in tints of brown, yellow, red and black, which, with their peculiar outline, renders these hills conspicuous at a considerable distance.

Robbin's Ranche. At Robbin's Ranche, ten miles above Kamloops, on the east side of the valley, there are two outcrops of grey crystalline limestone, apparently in a synclinal form. These are associated with dark blue and grey flinty shales, and calcareous breccia conglomerate, with crystalline feldspathic and dioritic rocks. Similar rocks occur in the vicinity of Kamloops, and up the valley of the North Thompson to near Clearwater. They are overlaid, in places, at as much as 1,200 feet above the river, by hard black columnar basalt of division II.

VI. *Anderson River and Boston Bar Group, and Upper Rocks of Leather Pass and Moose Lake.*—These rocks were first seen at

Anderson River. Anderson River, twenty-five miles aboveYale, where they succeed the crystalline rocks of division VII, and where the change in the geological structure of the country is accompanied by a corresponding change in its physical features, indicated by the widening out of the valley and the less abrupt character of the hills. The rocks here

Shales. consist of dark and bluish-grey earthy shales, with calcareous and sandy bands: between Boston Bar and Butcher's Flat they are exposed in numerous road-side cuttings, and are mostly blue and grey banded shales, much jointed and breaking up into rubbly and lenticular fragments. They

are all more or less calcareous, and there are occasionally thin bands of limestone. Dykes or bands of a partially decomposed and rusty-weathering diorite-porphyry are often seen associated with the slates. Wherever they occur, the latter appear to be much broken and twisted, though not otherwise altered. The rocks seen in the upper part of the Leather Pass, Slate Mountain, and along the shores of Moose Lake, which I have, chiefly on lithological grounds, associated with these, are slates and sandstones, with a good deal of grey quartzite or quartz rock, and thin-bedded limestones or calcareous sandstones. They dip pretty regularly N. 15°W. <35°-40°. I did not see any limestones in place. Amongst the loose stones, however, along the shore at the upper end of the lake, pieces of impure limestone which look as if they came from beds near by, are not rare, and nearly all the water-worn pebbles from the bed of the river at the Grand Forks are of impure grey limestone. I was not able to collect any fossils in them, and therefore the age of these rocks is uncertain. The opportunities for observations during this part of our journey were, I am sorry to say, very limited, and those which I made confined to such exposures as could be seen on the trail we were following.

Thin bands of limestone.

Leather Pass, Slate Mountain and Moose Lake

VII. *Cascade Mountains and Vancouver Island Crystalline Series.*—The crystalline rocks which I have already mentioned as occurring in the vicinity of Victoria and Esquimalt, and which are described in more detail in Mr. Richardson's Report, are supposed to belong to this series. Our first observations of them on the main-land were at Yale, and thence along the waggon-road, closely following the right bank of the Fraser for thirteen miles to the Alexandra Suspension Bridge. Crossing the bridge, the road continues up the left bank of the river, and similar rocks are seen for thirteen miles further to Anderson River, where, as has been already stated, they are overlaid in the valley by the rocks of divisions III and VI to within a few miles of Lytton. Thence similar rocks occur along the road to about sixty-seven miles from Yale, where they are concealed by the rocks of the volcanic series, division II.

Crystalline rocks.

Close to the toll-gate, leaving Yale, the hills rise in precipitous rocky slopes, exhibiting sections of massive beds of whitish granular rock, composed chiefly of quartz and feldspar; also bands of a dark grey fine-grained gneissoid rock. These rocks all shew more or less a banded structure, and resemble a hard feldspathic granitoid gneiss, holding epidote, black mica, quartz, orthoclase and hornblende, with occasionally sphene. At about one mile from the village, the cliffs and likewise the stratification are vertical, with a general strike about W. 25° N. magnetic. At a little more than six miles above Yale a band of white and greyish-white crystalline limestone crosses the road. It has been quarried to a small extent and burnt for lime, but most of it is apparently too siliceous for lime burning purposes. It dips at about 70° to the N.E. No fossils were recognized in

Gneiss holding epidote, &c.

Crystalline limestone.

it; the siliceous patches stand in relief on the weathered surfaces, and some of them may not unlikely be similar to those observed in the Vancouver Island limestone, which prove to be silicified fragments of fossils. Immediately beyond the limestone outcrop, the rocks are more schistose, and

Quartz veins.

the stratification is more distinct; there are also lenticular veins or bands of white quartz in a rusty-weathering grey gneiss. Near the seventh mile-post the rocks are less crystalline, quartz veins are numerous, and the stratification distinct dipping E.35° to 45° N. At 250 yards beyond the seventh mile-post, crystalline limestone again crops out on the road with dip N. E. <79° (Photos. Nos. 69,915 and 69,916), and again between the ninth and tenth mile-posts, where it is of a bluish color, and nearly fifty feet thick. It is here associated with green chloritic-looking rocks. The three outcrops are probably on the same band, the windings in the course of the road causing it to intersect the band in three places. In the neighbourhood of the suspen-

Porphyry.

sion bridge the rocks are chiefly grey feldspar porphyry, and feldspathic granitoid rocks holding hornblende and black mica, and passing occasionally into feldspathic diorites; these are cut by large reticulating veins of milky white orthoclase, mixed with large plates of a silvery-white mica. There are

Feldspathic veins.

also grey feldspathic diorite porhyries. At fifteen miles above Yale, the rock is a grey, micaceous, rather slaty gneiss, cut by similar veins of orthoclase feldspar. From seventeen to twenty-two miles from Yale, including China Bar Bluff, the heaviest rock cuttings on the road occur. They are chiefly through greyish-white, fine-grained, granitoid rock, very feldspathic, and cut by feldspathic veins, but also containing a little black mica, quartz and hornblende.

In some places this rock is traversed by three sets of joints, running respectively north and south, east and west, and horizontally, dividing it into blocks, with very regular even sides, from five to twenty feet long and

Building-stone.

from two to ten feet wide. An unlimited quantity of durable and handsome building-stone could be procured from these cliffs.

Beyond Anderson River, and to about fifty-two miles from Yale, the valley, as already stated, is occupied by newer rocks, but on either side, at some distance back from the river, the mountains are apparently entirely made up of similar feldspathic and dioritic crystalline rocks, rising steep and rugged to the line of perpetual snow.

VIII. *Granite, Gneiss and Mica-schist Series.* — The rocks of this division were first met with at Raft River (Photograph No. 69,958) a tributary of the North Thompson, six miles above Clearwater, and thence to the Grand Forks of the Fraser above Tête Jaune Cache. They represent, I believe, the oldest rocks observed in the country. The talcose micaceous schists of the Cariboo region, and the base rocks of the Selkirk Mountains and the Gold Range, probably belong to the same series. The stratification in the rocks of this series is often

Oldest roc observed.

Characters of rocks.

obscure, and they are much broken and disturbed. Among them we find gneiss and mica-schist of various textures and degrees of hardness, with large scales of white and black mica, and holding garnets ; also masses of almost pure feldspar, as well as hornblende rock, the former likewise holding garnets and black tourmaline. Specimens of these were found at Blue River Bluff, and at Garnet Creek Falls (Photographs Nos. 69,977 ; 69,978 ; 69-980). No limestone was seen *in situ* on the upper North Thompson, but, when crossing a stream flowing into it from the west, and which at some seasons must be a formidable mountain torrent, I found quite a number of pebbles and large fragments, some of them not much worn, of grey or nearly white crystalline limestone, and which, judging from their size and number, did not appear to have travelled far. This stream I named Limestone River. It was the only one of the numerous streams which we crossed, in following the left bank of the Thompson, where indications of limestone rock were found ; and it will perhaps become important in connection with the construction of this section of the railroad. It is about 170 miles above Kamloops, and between Blue River and Garnet Creek, which comes in on the opposite or east side of the Thompson.

Limestone River.

Near Albreda Lake, and soon after reaching the water-shed to Canoe River, rock exposures are plentiful on the hill sides, at short distances above the trail. They are, however, so far as observed, all of similar crystalline gneissose, granitoid and micaceous rocks. The distinct and often very regular stratification which is observable above the limits of the forest, on many of the high peaks and summits which rise abruptly from the river to the perpetual snow line, induces the belief that they are composed of a less altered and more recent set of rocks than those which are exposed in the valley and on the lower hill-slopes. Except the limestone fragments observed at Limestone River, however, and which might belong to rocks of the age of the Cache Creek group, I did not find on the North Thompson, above Clearwater, any direct evidence of the occurrence of such rocks, though carefully looked for in the detritus of all the tributary streams: nor in crossing the mountains to avoid the canons of Murchison's Rapids, between Mad River and Blue River, and which took us to an elevation of probably more than 6,000 feet above the sea, were any but granitoid and gneissose rocks met with. The rocks exposed along the rapids, which we descended on our return journey, are all of similar character.

Albreda Lake.

Granitoid and gneissose rocks.

On the waggon-road between Vanwinkle and Barkerville these rocks are first seen, about one and one-half miles north from Vanwinkle, on Lightning Creek. Thence to Barkerville on Williams Creek, a distance of nine miles, no other rocks are seen. At Barkerville they are overlaid unconformably by rocks apparently of the Cache Creek group, with bands of crystalline white limestone in thin beds.

Vanwinkle and Barkerville.

Average strike. The average strike of the micaceous schists is about N. 70° W. and S. 70° E. They are much disturbed and crumpled, and are generally dipping at high angles.

Gold indications. The country in which Raft River and Mad River have their sources presents favorable indications as a gold-bearing region, and is, I think, worthy of being carefully explored and prospected.

Appended is a Report by Dr. T. Sterry Hunt on the silver ores from the Eureka Mine near Hope, and on some of the fossil woods and rocks from the Fraser near Quesnel Mouth, as well as from the section given on page 123.

There are many more specimens from the several groups enumerated which require further study and analysis for the precise determination of their characters.

REPORT BY DR. T. STERRY HUNT.

With regard to the specimens, ores, coals and rocks lately placed by you in my hands, from the main-land of British Columbia, I have to report that time has not allowed me to make so complete an examination as I should have desired ; they have, however, yielded me some interesting results, which I beg to lay before you.

Silver ore from Eureka Mine. *Silver ore from the Eureka Mine, near Fort Hope.*—These specimens show a veinstone of spathic iron, with some quartz, through which is disseminated a massive steel-grey ore giving a black powder, and yielding by analysis sulphur, antimony, copper and silver. I was not able to obtain sufficient in a pure state for a quantitative analysis, but, from the comparatively large proportion of antimony and copper which the ore contains, it would seem to be probably a highly argentiferous fahlerz or freibergite. An average sample of the veinstone, in a much decomposed condition, gave 1.19 per cent of silver, of which 0.11 per cent was present in the form of chlorid, and was dissolved from the raw ore by a solution of hyposulphite of soda. Other considerable masses of the ore would yield a much larger proportion of the precious metal.

Coal from Nicola River. The coal from Nicola River gave a firm dense coke, and a very small amount of grayish ash. The analysis by slow coking gave as follows :

Fixed Carbon	74.58
Volatile	21.51
Ash	3.91
	100.00

Lignites. The lignites from the Fraser River at the mouth of the Quesnel are very variable in character: some of them are a light brown-coal, approaching

to jet in texture, while others are impregnated with carbonate of iron, which has nearly replaced the woody matter. These are brownish in color, very heavy and hard, and dissolve in heated hydrochloric acid, leaving a small ligneous residue, which is yellowish-brown in color, and in one specimen was found equal to about 7.0 per cent. The analysis of this, which was a portion of an unflattened trunk, several inches in diameter, showed it to be a good iron ore. It gave: Iron Ore.

Carbonate of Iron	85.00
Carbonate of Lime	3.60
Carbonate of Manganese	1.10
Carbonate of Magnesia	2.80
Organic Matter	6.60
Insoluble Ash	50
	99.60

Several specimens of volcanic rocks from near Quesnel Mouth were examined. One of these was fibrous, another scoriaceous, and a third compact and vitreous, but all were highly ferruginous lavas, readily fusible before the blowpipe. The last mentioned had a specific gravity of 3.96. Volcanic rocks.

Two other specimens were much less dense ; of these the one having a specific gravity of 2.36, was of a pale purplish or lilac color, nearly opaque, with a conchoidal fracture, a somewhat waxy lustre, and the hardness of quartz, or near it. This resembles what is called pearlstone. The other, with a specific gravity of 2.45—2.52, resembled the last in hardness, lustre and fracture ; but was in great part of a pitchy-black, with, however, an adherent portion of a material, which, with a similar hardness, lustre and fracture, had a light reddish-brown color. The black mineral has the characters of pitchstone. Pearlstone. Pitchstone.

Accompanying these specimens was a portion of fawn-colored rock, which was apparently an indurated clay, having a considerable hardness and cohesion, and very absorbent. Indurated clay.

Character of the Land.

I have already, in a previous part of this Report, alluded to the character of the soil of the Fraser Valley between Yale and Lytton. Approaching Spence's Bridge a marked improvement in the character of the country is observed. We here come upon the western edge of what I have designated the great central plateau, the soil of which, wherever we traversed it, appears to be excellent, but, owing to the extreme dryness of the climate, it is only in exceptional seasons that it can be cultivated successfully, without irrigation; wherever this had been resorted to we observed splendid crops of wheat, oats, barley, potatoes and vegetables of all kinds. Soil of central plateau.

The following facts on crops and vegetation were collected by Mr. Richardson. At Mr. Robert Carson's Pavillion Mountain Farm, of three Crops.

hundred acres, on the Lillooet road, there are one hundred and fifty acres under cultivation.

Wheat 30 acres, yield 1,400—1,500 lbs per acre.
Barley 30 " " 1,300—1,500 " "
Oats 70 " " 1,600—1,800 " "
Peas and Beans 3 acres, produce not ascertained.
Potatoes 6 acres, yield 30,000—40,000 lbs per acre.

The oat crop sometimes reaches 2,700 lbs per acre. Timothy grass from one and a half to three tons per acre. Red clover grows well. This farm has been only four years settled upon. Mr. Carson continues to break up from twenty-five to thirty acres each year. The whole farm is irrigated by water brought seven miles. The prices obtained on the farm are for wheat, barley, oats and potatoes, two to three cents per lb.; hay, forty dollars per ton; bacon, twenty to twenty-seven cents; beef, ten cents per lb.

Sowing time and harvest.

Sowing time, 1st April; harvest, from middle of August to middle of September; reaping and thrashing done by machine. Cattle live out of doors all winter. Snow-fall averages about eight inches.

At the Australian Ranche, about twenty miles below Quesnel Mouth, of 640 acres belonging to Henry Downs and Compy., there are one hundred acres under cultivation.

Wheat 14 acres, yield 2,500 lbs per acre.
Barley 32 " " 2,500 " " "
Oats 16 " " 2,500 " " "
Turnips 7 " " 25 tons of 2,000 lbs per acre.
Potatoes 2½ " " 25 " " "
Timothy 30 " " 3,500 lbs per acre.

The proprietor stated that by careful cultivation and attention to irrigation the wheat crops could be brought to 3,700 lbs. per acre. All kinds of vegetables grow equally well. The prices obtained at Cariboo, eighty miles distant, are wheat, barley and oats, nine cents per lb., potatoes, ten cents per lb., butter, seventy-five cents per lb. Sowing and planting commences the first week in April; harvest, August and September. Stock require to be fed from the first week in December to the last week in March.

Prices at Cariboo.

All the foregoing yields are obtained by irrigation. The average of lands not irrigated on the same farm are, wheat, barley and oats, from seven hundred to one thousand lbs. per acre. Potatoes and turnips from six thousand to ten thousand lbs. per acre. Timothy from one thousand to twelve hundred lbs. per acre. This proves the great value of irrigation, the character of the soil in both cases being the same.

Value of irrigation.

On lands about four miles nearer Quesnel Mouth, large fields of oats and barley, grown without watering, were being harvested on the 4th of September. On one of the fields of oats, which appeared to be an average of all, the straw was about five and a-half feet high, and strong in proportion; and one head counted eighty corns on five stalks.

About Kamloops most of the higher ridges and hills are thinly timbered with pine and fir, the latter chiefly in the gulleys ; where a species of small shrubby cedar or juniper is also common. The country is everywhere well covered with bunch-grass. Sagebush (*Artemisia*), and a dwarf cactus are likewise characteristic plants. As a grazing country for cattle and horses, it can hardly be surpassed; abundant feed, shelter in all weathers, and the climate so mild that stock do not require to be housed during the winter, and only occasionally to be fed with hay. The peculiarities of this central plateau region in British Columbia have been noticed by Colonel Moody, without, however, referring them to any physical or geological cause. He described the country as, " A line of soil running obliquely through the country in a north-easterly and south-westerly direction, on which you have the bunch grass and *Pinus ponderosa*, while on either side of it you have neither the one nor the other." Vegetation about Kamloops.

Whether regarded in reference to its geographical position, its geological structure, its characteristic vegetation, or its peculiar climate, it very closely resembles the region which we traversed on the Union Pacific Railroad, east of the Sierra Nevada. The dryness of the climate is doubtless due to the absence of forest, caused probably by the nature of the soil not favouring its growth ; and the soil is dependant on the character of the rocks. Thus geological causes may be regarded as the real origin of all the peculiarities observed.

On the Fraser, from Lytton downwards, berries of several kinds are very abundant. On the flats about New Westminster, large quantities of cranberries are gathered and exported to San Francisco. The principal berry, however, is the service-berry (Indian name *Olelly*), about the size and appearance of a black currant. It grows on a shrub from three to ten feet high, and forms a staple article of food amongst the Indians. The women collect it in large quantities on the steep and stony hill sides, everywhere along the valley of the Fraser, between Yale and Lytton. They appear to steam or parboil the berries, and then make them up in large flattish cakes mixed with grass ; these are dried in the sun and *cached* for winter use. The object of the grass is, I believe, only to give consistency to the cakes. The Indians likewise use largely a species of moss or lichen, rather like long black horse-hair, which grows on the pine and fir trees, and from which they make a beverage called ' *sapolell*,' which is, I believe, slightly intoxicating. Native fruits. Intoxicating beverage.

In the central plateau country, the service-berry does not appear to be so plentiful, and about Kamloops is confined to the river flats. A few bushes of it were seen in the Leather Pass above the Grand Forks of the Fraser. It is, however, rare on the North Thompson, above Clearwater. Raspberries, strawberries, gooseberries, currants and choke-cherries are abundant. I also observed near Kamloops a large *Cratægus*, loaded with

Wild flax and hemp.

blackish-red fruit. On the central plateau country, wild flax and hemp were observed, growing luxuriantly.

Valley of the North Thompson.

For the purpose of settlement, very little can be said in favor of the valley of the North Thompson, above Clearwater. The soil is generally of a light sandy or gravelly character; and the flat lands bordering the river, and which might be available for cultivation, seldom reach three-quarters of a mile in width, and occur only at considerable intervals. After passing the water-shed, however, at Albreda Lake, the valley opens out, and from Canoe River to Cranberry Lake, and thence down the valley of Selwyn River to the Fraser at Tête Jaune Cache, the valley, including the lower benches or terraces, is seldom less than three to four miles wide, with but little timber, and affording excellent summer pasturage. Indeed we were informed by the Indians that they frequently winter their horses between Canoe River and Tête Jaune Cache, and that they find them in excellent condition in the spring.

Plants.

Several varieties of grass are abundant in this district; two species of *Equisetum;* a vetch and a blue lupin, both locally called pea-vine, are also plentiful, and apparently form a very favorite food of both horses and cattle.

Grazing country.

On most of the mountains above the limit of the thick forest (from 4,000 to 6,000 feet,) there seem to be very considerable tracts of fine summer grazing country. The ground is mostly swampy, and numerous small lakes and ponds, belts and patches of stunted fir and pine, and open plains or meadows are the usual features met with. These alpine pastures possess a characteristic vegetation; the blue lupin, before referred to, being a very conspicuous plant.

The stereoscopic views taken near the summit of the mountain trail, between Mad River and Blue-River, afford an excellent idea of the general aspect of this elevated region.

Forests.

Birch is the only hard-wood tree seen in the forest of the North Thompson and the Fraser; but for cedar of gigantic size, hemlock, spruce, and other species of fir and pine, the forests of the North Thompson offer a magnificent field for the operations of the lumberer. The cedar is, I believe, the *Thuja gigantea;* and trees of from ten to eighteen feet in circumference, and from 100 to 150 feet high, are not uncommon. The photographs Nos. 69,974 and 69,975, afford a good representation of one of these cedar forests. The cotton-wood grows to a very large size, and is the best wood for making canoes. One, out of which we made our largest canoe at the North-west Branch crossing, was nearly four feet in diameter. Various species of willow, alder, poplar and aspen form the woods on the flats bordering the river. A species of *Viburnum* (tree-cranberry), and the mountain ash, enliven the forest with their bright red-berries; hazel, elder, and ground-hemlock or yew, and an occasional maple shrub, were also observed. The most obtrusive and troublesome plant to the traveller in these forests, however, is a species

of prickly *Aralia*. It has a large, deeply-cut leaf, not unlike that of the purple-flowering raspberry, which is also common, and a long, trailing, rather woody stalk. Every part of the plant is thickly covered with small sharp prickles. It grows to a height of about four feet, and often thickly covers the ground. A gentle touch with the naked hand was sufficient to get the skin filled with the prickles, which really seem to have a greater affinity for human skin than for the parent stalk. When clearing the trail through it, even stout clothing afforded very imperfect protection, and the subsequent inflammation and irritation, particularly in the hands and knees, were most unpleasant and painful. Ascending the mountain trail we soon got above the limit of these irritating companions, but only to find them more abundant on our return to the valley. *Aralia.*

At 4,000 feet and upwards, the principal undergrowth on the hill sides, is a plant resembling *Azalea*, with a small white flower and a somewhat trailing woody stem.* It often stands three feet high, sometimes even more, and forms quite a dense thicket, difficult and very fatiguing to travel through. A species of heath, (*Erica*), with a pink flower, and many other plants, not seen in the woods below, were likewise observed on these heights. Among the smaller plants observed, the pigeon or bunch-berry (*Cornus Canadensis*,) has perhaps the greatest horizontal and vertical range. The *Mahonia*, or holly-leaved barberry, locally called the Oregon grape, is also widely distributed, and on a hot day the fine-flavored, acid fruit, which it bears in the greatest profusion, is very refreshing to a thirsty traveller. Two or three species of blueberry are also common, but were not observed above 4,000 feet. A species of *Smilacina*, with bright orange-colored berries, is also common in damp shady places. There are many other plants which I am not familiar with. Of some of these specimens were collected, but had to be abandoned when we lost our canoes. The plant locally called Hudson Bay tea is abundant all through the upper country, in moist or swampy situations, and is, I believe, the same species as that known on this side as Labrador tea,—*Ledum latifolium*. The infusion from it, if not made too strong, is by no means an unpleasant beverage, even without milk or sugar. The *Kinnikinnik*, or Indian tobacco plant, is also common; probably, however, a different plant from that known by the same name, and used in a similar manner, by the Indians in Eastern North America. Alpine plants. Common plants.

There are no Indians resident on the North Thompson above Mad River, or on the Upper Fraser. After leaving Mad River to cross the mountains, we met only three families until our return to Clearwater. These were out on hunting expeditions, but did not seem to have met with much success. Except squirrels, the only quadrupeds seen, or reported to have been seen by any of the party, during the journey from Kamloops to the Leather Indians. Game.

* Specimens for determination were collected, but were abandoned when we lost our canoes.

Pass and back, were one bear, one porcupine, two hares, one fox, one marten and one mink. Traces of bears and of beaver were occasionally pretty abundant, and we also observed a few tracks of deer, moose and cariboo. The marmot, or ground hog is, I believe, one of the most abundant of the fur-bearing animals; the lynx is not rare, and the carcajou or wolverine is met with occasionally. Two or three varieties of grouse or wood-partridge are abundant. In their habits they do not differ from those found in Canada. The willow-grouse and the black-grouse are the commonest species. The former frequents chiefly the willow and alder coppice along the river flats, and the latter the thick pine and cedar forests on the hill sides. We commonly killed from two to six every day, and they formed a very welcome addition to our daily bill-of-fare of beans and bacon. These birds are an easy prey to the hunter, and are locally known by the appropriate designation, 'fool-hens.'

Beasts, birds and fishes are decidedly scarce throughout these gloomy forest regions; of the latter only two small trout were captured, and only one salmon seen during the expedition above Kamloops.

Though British Columbia possesses considerable tracts of fine agricultural and pastoral land, amply sufficient to produce all the food her own population is ever likely to require, yet it is not probable that she will ever hold a prominent position as an exporting agricultural country. Her chief resources are her forests, her fisheries and her mines; and these are capable of almost unlimited development. Her gold-fields, her silver-veins and her coal-mines are yet in their infancy; her timber trade is in a similar condition, and her fisheries, which may fairly be expected to rival those of the Atlantic Provinces, have not yet extended beyond the supply of local requirements.

Fisheries and Mines.

There can scarcely be a doubt in the mind of any one who has visited the country, that a bright and prosperous future is in store for the Alpine Province of the great Dominion; only to be realised, however, when the iron road shall have brought her into closer communion with her elder sisters in the east.

Future of the Alpine Province.

I have the honor to be,
Sir,
Your most obedient Servant,
ALFRED R. C. SELWYN.

126 125 124 123

50 49

C. Mudge

Kaakoosham Point

Ranges Pk 5000

4500

4700

Alexandra Pk 6594

Mt Washington

Mt Albert Edward 6668

Union Coal Mine

Beaufort Coal Mines

Beaufort

Ranges

TEXADA I.

Hornby I.

LASQUETI I.

SOUTH

STRAIT OF GEORGIA

Ballenas I.

Mistaken I.

Gabriola I.

Douglas I.

Winchelsea I.

Nelson Hill

Rudder Rock

Mt Moosse Ht.

Mt Arrowsmith

Mt Moriarty

Departure B.

Extension Coal Mine

Dunsmuir Coal Mine

Protection I.

Nanaimo Coal Mine

NANAIMO H.

Nanaimo River

GALIANO I.

Mayne I.

Mt Prevost

ADMIRAL

Retford Mt.

Pender I.

Portland I.

Hornby I.

Cook Pt.

NORTH SAANICH

Coal Pt.

Coal Bay

ORCAS ISLAND

Saanich Inlet

SAN JUAN I.

Cormorant Bay

HARO STRAIT

VICTORIA

Esquimalt

EXPLANATION

Workable Coal Seams

Area of Coal Measures

GEOLOGICAL SURVEY or CANADA.

Alfred R.C. Selwyn F.G.S. Director.

MAP

Shewing the position of the

COALFIELDS

—OF—

NANAIMO AND COMOX.

VANCOUVER ISLAND.

to accompany the report of

Mr James Richardson.

1871.

Scale 10 Miles to one Inch

Miles 10 5 0 10 20 30 40 50 Miles

REPORT

ON THE

COAL FIELDS OF THE EAST COAST

OF

VANCOUVER ISLAND,

WITH A MAP OF THEIR DISTRIBUTION,

BY

MR. JAMES RICHARDSON;

ADDRESSED TO

ALFRED R. C. SELWYN, ESQ., F.G.S.

DIRECTOR OF THE GEOLOGICAL SURVEY.

MONTREAL, May 1st, 1872.

SIR,—The geological exploration in which, under your instructions, I have been engaged during the past season on the Pacific side of the continent in British Columbia, may be divided into two parts; namely, those general preliminary investigations in the interior of the continental portion of the Province, in which I had the honor for some time to accompany yourself, and those of a more special character connected with the coal deposits of Vancouver Island.

Exploration in British Columbia and Vancouver Island.

The geological facts collected by me on the former, with my impressions of the country, have already been communicated to you, to be embodied, as I understand, in your own Report; I need not therefore repeat them here; and I shall only further allude to this part of the work, for the purpose of stating the extent of the area it covered and the time it occupied.

Leaving Victoria in Vancouver Island by steam, on the 25th of July, in company with the various surveying parties appointed on the Canadian Pacific Railway, we crossed the Strait of Georgia to New Westminster, near the mouth of the Fraser River, and ascended that stream to Yale, which is the present head of steam navigation from the sea. Starting

New Westminster to junction of North and South Forks of the Thompson.

thence on foot we followed the Cariboo road, keeping along the margin o the stream to Lytton, situated at the junction of the Thompson river. Proceeding farther by stage, we ascended the valley of the Thompson, along the same road, to Bonaparte House on the Bonaparte River, near its junction with the Thompson, and then, leaving the Cariboo road, continued up the valley of this stream to Kamloops Lake. This we ascended by boat, and reached the junction of the North and South Forks of the Thompson, close by the head of the Lake, the distance to this point from Yale being about 160 miles, and the time spent in accomplishing the journey from Victoria, including many stoppages on the road, having been fifteen days.

The experience which we had by this time acquired, convinced us that we should get through the examination of a much larger extent of country in a given time by separating and pursuing the investigation of distinct tracts. Leaving you therefore, on the 19th of August, to accompany Mr. McLennan's railway party, I returned westward to Bonaparte House, descending Kamloops Lake by boat and hired canoes, and examining the rocks on each side in some detail. From the outlet of the Lake I pro-

Measurement of roads.

ceeded on foot, measuring the road by prismatic compass and pacing as I went along, and registering the position of the rock exposures after the investigation. The distance of this part to Bonaparte House was found to be twenty-four miles. From this, turning northward and following the Cariboo road, my measurements were continued to Clinton for thirty miles, and for twenty-four miles farther to what is called the seventy-mile house. Understanding that in the next eighty miles to Deep Creek there was only one exposure of rock, and that of no great extent, it was judged expedient to travel the distance by stage, an opportunity being afforded for the examination of the exposure as we passed along. In the next ninety miles, by Soda Creek and the bank of the Fraser River, along which the Cariboo road again runs to Quesnel Mouth, the rock exposures, with the exception of those in the first ten miles, were said to be almost

Coal.

continuous, and in some places to display coal. These ninety miles were therefore measured.

From this point the road turns eastward, crosses the Cotton-wood River, and runs up the valley of its tributary, Lightning Creek. On this creek

Vanwinkle.

is situated Vanwinkle. The distance between Quesnel Mouth and Vanwinkle is about sixty miles, and the exposures not being numerous, I availed myself of the stage between them, trusting that such stoppages as might occur would afford opportunities for the examination of them. Thence to Barkerville and beyond, in the Cariboo gold region, twenty miles more were measured.

It was now the 17th of September, and part of my instructions being that before the close of the season I should visit some of the Vancouver

coal deposits, it was deemed prudent to return towards the Island. I did so by stage as far as Bonaparte House, stopping on the way at Clinton to make a measurement on the Lillooet road, as far as Carson's farm on Vermillion Mountain, thence across the hill to and up Marble Canon, the distance being altogether about thirty miles; and another eastward from Clinton of some eight miles across to the Bonaparte River. Return towards Vancouver Island.

From Bonaparte House to Yale, the road was measured all the way, the distance being about 110 miles; and additional intermediate measurements were made from Spence's Bridge, one of them twenty-five miles up the Nicola River, to the south-east, and an opposite one of ten miles on the flank of the Cascade Mountains. From Yale returning to Vancouver Island by steam, I reached Victoria on the seventh of October.

The whole of these measurements amount to about 370 miles, about 500 having been travelled on foot to accomplish them, and it is hoped that they will hereafter be serviceable in the construction of a final geological map. Total measurements in British Columbia.

Before entering on the examination of the Vancouver coal deposits, it was necessary to equip myself with a tent and provisions, to look out for a boat, and to hire such men as might be required to assist me; and, while, arrangements in connection with these preparations were in progress, my time was occupied in such examinations as could be made of the neighbourhood of Victoria.

Leaving this place on the 17th October, I was conveyed by steamer, with my boat and two men, as far as Nanaimo, a village on the south-west side of the strait, about seventy miles from Victoria, where coal has been worked for the last twenty years. A week was spent in the examination of the rocks of this vicinity, and a free passage having been afforded me on the government steamer Sir James Douglas, through the kindness of Mr. W. B. Pearce, Assistant Crown Land Commissioner for British Columbia, I proceeded about seventy miles farther to Comox Harbour, near which several coal claims have been taken up within a year or two, reaching it on the 27th of October. Coal is known to occur sixteen miles still further along the coast, but as I understood there was no good shelter, and as I wished to make my chief examinations by returning along the coast in my boat, it appeared to me that the season was too far advanced to render it prudent to go beyond Comox. I accordingly returned from there to Victoria, where I arrived on the 23rd of November, and after continuing my examinations in its vicinity until the 22nd of December, started on my return to Montreal. Nanaimo. Coal claims. Return to Montreal.

Coal Deposits.

Coal-seams are known to exist in other parts of Vancouver Island, besides those already alluded to. They have been met with towards the north-western end, one locality being on the north-east side, near Fort

Rupert, on Queen Charlotte Sound, another on Quatsino Sound, which opens on the south-west side into the Pacific; and there appears at present nothing to render it impossible that they may spread out in some places into the centre of the sound. But I shall here confine my remarks to those parts which I have visited on the Strait of Georgia. These appear to belong to a narrow trough, which may be said to extend from the vicinity of Cape Mudge on the north-west, and to approach to within fifteen miles of Victoria on the south-east, with a length of about 130 miles. It is occupied by a series of rocks which in some places present a rolling surface, with no elevations rising to a greater height than 800 or 1,000 feet, and in others is comparatively level. It possesses generally a good soil, and may hereafter be thickly settled. It is mostly covered with forest, but in some parts presents a prairie or park-like aspect, with grass-covered ground, studded with single trees or clumps of them, and offers great encouragement to agricultural industry.

Trough.

Soil and vegetation.

The north-east side of this trough lies beneath the waters of the Strait of Georgia, and on that side is bounded by crystalline rocks coming apparently from beneath it in Lasqueti, Texada and other islands, and on the main-land beyond; while on the south-west it occupies a strip along Vancouver Island, limited by a range of very bold mountains of the crystalline series, which runs nearly parallel with the coast, having points of from 4,000 to 7,000 feet above the sea. In the first or nearest ridge of these are Mount Washington, 5,410 feet, Beaufort Range, 4,900 and 5,420 feet, Mount Arrowsmith, 5,970 feet, and Mount Moriarty, 5,185 feet; while in the second ridge, farther in the country, is Alexandra Peak, 6,394 feet, and Mount Albert Edward, 6,963 feet; all as represented by Captain Richards in his Admiralty chart, a copy of which was kindly lent me for use by Captain Clark of the Sir James Douglas Steamer.

Crystalline rocks.

Height of mountains.

In the general trough, coal-seams are exposed in upwards of a dozen different places, and in five distinct localities *claims* have been laid before the government by different companies. The most instructive exposure is one that occurs about five miles (S 63°W)* from the shore on the south-west side of Comox harbour, on the claim of the Union Coal Mining Company.

Claims.

Here in an almost perpendicular cliff, which rises on the north side of a small brook, tributary to the Puntledge River, there occurs the following descending section, the coal-seams in which I shall number in ascending order: †

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* All the bearings in this Report are given in relation to true north, magnetic north being twenty-two degrees to the east of it.

Analyses of samples from the principal coal-seams examined by me in Vancouver Island will be found by reference to Dr. T. Sterry Hunt's Report, appended.

	Ft.	Ins.
Brownish or drab-coloured, slightly calcareous sandstone, the grains of which are composed of quartz, feldspar and mica, with some of a black substance supposed to be peroxide of manganese, the beds being from one to five feet thick	45	0
Coal (No. 4), black and shining, apparently clean and free from shale	4	6
Brownish-black argillaceous shale and greenish-brown sandstone, interstratified with one another in thinnish layers, the shale predominating, and both holding thin, irregularly-distributed, lenticular patches of coal, which may constitute about one tenth of the mass; no indications of roots penetrating the upper part of the bed were observed	15	0
Coal (No. 3), apparently all of good quality	5	4
Brownish-gray or light drab sandstone, in beds of from one foot to eighteen inches	10	0
Coal (No. 2), apparently clean and of good quality	6	0
Brownish-gray or light drab sandstone, interstratified with thin layers of black, soft, argillaceous shale	3	0
Coal (No. 1), without observed impurities	10	0
Total	98	10

Dip of measures.

The dip of the measures in this part is N. 32° E.<11°. The brook, which, is, as already stated, a tributary of the Puntledge, runs north-westward, nearly on the strike, and at some height on the right bank, about 600 paces down the stream, a coal-bed of four feet and a half is exposed, which very probably corresponds with number 4 of the above section, and shows an apparent regularity in its course, and in the attitude of the measures, for at least that distance.

New road.

None of the seams in this locality have yet been opened for productive working; but during the past summer a road has been cut out and cleared of wood to a breadth of some twenty or twenty-five feet, for a distance of four miles, leaving about three miles more still to be freed of heavy timber. The level of the brook where the seams are exposed, is about 500 feet above the sea, and the road will have a pretty even fall the whole way to it.

Coal-seams N. W. from Union Claim.

Coal-seams, said to resemble those which have been described, occur at no very great distance in a north-western direction from the Union Claim. They were first discovered by Mr. P. J. Leech, and are mentioned by him, in the Report of his exploring expedition of 1864, as being an eight-feet and a five-feet seam, situated on a western tributary of the Puntledge, which falls into the Courtnay River about two miles above its mouth. Not having obtained information of their precise position until I had left the Union Claim, they were not visited by me, and I cannot therefore offer an opinion as to their stratigraphical relations. I was told also that still further to the north-west, the position being sixteen miles from Comox Harbour and close upon the coast, there is a four-feet coal-seam, but the weather prevented me from visiting it.

About five and a half miles along the coast from Comox Harbour, in a general bearing about S. 28° E., there occurs a trail or path leading to

Beaufort Mine. what is called the Beaufort Coal Mine; the general bearing of the path being S. 80° W., and the distance from the coast a little over five and a half miles. Here, on the left side of a small stream called Bradley's Creek, there occurs a seam of good hard coal, measuring 3 feet 2 inches, and resting on two feet of soft black argillaceous shale, beneath which there are visible between five and six feet of brownish-gray sandstone, holding disseminated pebbles of quartz, feldspar and diorite. The dip of the strata is here N. 27° E. < 18°, and Bradley's Creek, which, flowing north-eastward, ultimately gains Baynes Sound, at this place crosses the measures nearly at right angles.

Sandstone. Proceeding down the stream, the coal-seam appears to be overlaid by a considerable thickness of sandstone, and, at the distance of about half a mile, another coal-seam occurs, of which, from the quantity of water in the brook, no more than two inches were visible; while half a mile farther on, there are indications of still another seam. These two seams, from the quantity of water caused by recent heavy rains, were very imperfectly seen by me; but Henry Bradley, one of my men, who was one of the first discoverers of the seams on this claim, and was afterwards employed to ascertain their thickness, informed me that the two in question were from one to two feet each. He also informed me that about a mile and a half to the westward of the position where the lowest of the three seams is

Seam on Trent River. exposed, there occurs a fourth seam on the Trent River. The quantity of water prevailing, and the occurence of an intervening swamp, prevented me from visiting this seam, but Bradley gives the thickness, as far as ascertained without reaching the bottom of it, as nine feet.

The transverse distance in which these four seams occur appears thus to be upwards of two miles, while the four seams of the Union Claim, with a less apparent dip, would not occupy a greater breadth than 250 feet; and the strike of the latter would seem to place them considerably higher in the measures. If it should hereafter be ascertained that any of the seams of the two localities are identical with one another, it can only be through the occurrence of undulations or faults, of which we at present know nothing.

Five miles along the coast, in a bearing S. 18° E. from the trail to the Perseverance Claim, a path runs inland, in general bearing S. 70° W., and leading, in a distance of a little over two miles in a straight line, to the Baynes Sound Coal Mines. Here in a deep gorge, through which a small

Baynes Sound Coal Mines. stream of water finds its way in its course to Fanny Bay on Baynes Sound, occurs the following descending section:—

	Ft.	Ins.
Brownish-gray or drab, moderately fine-grained sandstone, slightly calcareous, with scales of white mica, and in layers of from six inches to two feet, holding fragments of the stems and leaves of plants.....	30	

Coal, clear and hard	5	10
Brownish-gray or drab sandstone, in beds of from six inches to four feet thick, holding fragments of plants	48	0
Black, soft, argillaceous shale, with short thin lenticular patches of coal	5	0
Brownish-gray or drab sandstone, in beds of from six inches to two feet	5	6
Black soft argillaceous shale with obscure impressions of plants	2	0
Coal, which appears to vary in its thickness, being in some parts not over 5 feet two inches, and in others seven feet, while the lower two feet shew occasionally thin seams of carbonaceous shale, with obscure impressions of plants, say	6	0
Brownish-gray or drab, moderately fine-grained, slightly calcareous sandstone, with scales of white mica	5	0
	107	4

Dip of strata.

The dip of the strata is here N. 86°, E. < 15°, gradually increasing to 40°, and the two coal-seams are seen descending in both sides of the ravine, the edges of the lower one meet in the bottom of the stream, but while those of the upper one are still about twenty feet above the water, a fault occurs cutting them off. The underlie of the fault is S. 62° W. < 38°, and the dip of the strata on the other or eastward side of it is N. 64° E. < 43°. The strata on that side, after an interval in which seventy feet of the base are concealed, consist of seventy-two feet of brownish-gray sandstone, holding a few fragments of plants, overlaid by ten feet of black argillaceous shale. As these beds are not recognized on the west side of the dislocation, the amount of it, on the side on which the strata are thrown down, cannot be determined with certainty, unless a small mass of coal which is caught in the fault, and lies lower than the extremity of the upper seam, be derived from it. In that case the down-throw would be on the east side. In a position, which appears to be close to the east side of the fault, a shallow shaft has been sunk in search of the upper seam; it penetrates the measures on that side, but sandstone alone appears to have been excavated.

Fault.

Separate zones.

The section which has been given above does not suggest any means of identifying the coal seams displayed in it with those of the previous localities. It may reasonably be supposed, however, that the whole of those described belong to the lower part of the measures, and the localities may each belong to a separate zone.

Denman's Island.

On the coast, no rocks are seen from the path leading to the Baynes Sound Claim all the way to Qualicum River, a distance, in a general south-eastward course, of sixteen miles. But on Denman's Island, lying on the north-east side of Baynes Sound, there is a continuous exposure for ten miles, which is nearly the whole length of the island, in an escarpment rising up from ten to seventy feet, and running pretty much with the strike.

Sandstone and shale.

The rocks presented consist almost altogether of brownish-gray or drab sandstones, in beds from two inches to two feet thick, but chiefly of about six inches, separated by thin partings of black argillaceous shale, of which,

however, occasional beds occur of ten feet in thickness, the shales hold occasionally thin lenticular patches of coal, sometimes extending unbroken for twenty feet, but often displayed interlocking with one another, for a mile or more on one horizon.

Lenticular patches of coal.

At the base of the escarpment the sandstones frequently display ovoid masses, from six inches to one foot thick in one direction, by from nine inches to two feet in another. These present occasionally a net-work of calcareous veins, giving them the aspect of septaria, and the sandstones themselves are probably in general slightly calcareous. Impressions of plants did not seem to be abundant. The strike of the beds coincides with the general bearing of the island; in some places they appear to be quite flat, but generally the dip is in a northeasterly direction, at from one to ten degrees.

Calcareous veins.

From Qualicum River to North-west Bay, in a bearing about S. 75° E., there is a distance of about twenty miles in which no rock exposures were observed. Beyond this, masses of the crystalline series present themselves, continuing for fourteen miles in the same bearing, and separating what may be called the Comox field from one farther on; shewing that the general trough is divided into two distinct basins.

Two distinct basins.

The Comox basin would then have a length, between Cape Mudge and North-west Bay, of about sixty four miles, but limiting it, for safety sake, and the probable occurrence of some thickness of unproductive measures at the base, to the distance between Kookooshun Point and Qualicum River, it may safely be called forty miles. The greatest breadth from the Beaufort Claim to a line in the run with the outside of Cape Lazo, or, as it is commonly called, Point Holmes, would be about thirteen miles, without taking into consideration what may be beyond under the water. But estimating the average breadth to be somewhat over seven miles, the productive area may safely be considered to hold about 300 square miles.

Productive area.

The rule applied in the coal-field of South Wales in the United Kingdom, to calculate the productiveness of a coal-seam, gives 1,000 tons for every square foot in each acre of a seam one foot thick, leaving a sufficient quantity for pillars to support the roof. In the Union area the total thickness of workable seams is a little over twenty-five feet. This would give 25,000 tons per acre or 16,000,000 tons per square mile. In the Baynes Sound Mine the quantity would be about 12,000 tons per acre, or per mile 7,680,000 tons. Not having seen the full thickness of all the seams on the Beaufort Claim, I shall not venture upon a calculation, but any one can easily make it for himself. To attempt a calculation of the productive yield of the whole field would be premature, before all the details of its structure have been ascertained, seeing that where the seams sink beyond a certain depth they can scarcely

Quantity of coal.

be profitably worked, and until all the seams have been discovered, the undulations determined, and the dips every where observed, how much or how little of the seams are in this condition cannot be known. For the facilities of trade, Comox Harbour would afford excellent accommodation to both the Union and the Beaufort Mines. The former being, as already stated, five miles from it, with a fall of about 500 feet, while the latter is about seven miles distant, with a fall of about 700 feet, Baynes Sound with proper wharfage, might be made available at most places. It is in one place less distant from the Beaufort Mine than Comox, but the fall is not so even. Baynes Sound Mine is about 200 feet above the sea, and Fanny Bay on the Sound is about three miles south-east from it, while Deep Bay is about eight miles. Both of these harbours, though small, are safe, especially the latter, being thoroughly protected from all winds. The approaches to all the harbours named, as well as the harbours themselves, have a depth of from five to twelve fathoms at low water. The more southern division of the two into which we have separated the general trough holding them both, may be called the Nanaimo Field or Basin.

Comox Harbour.

Safety of harbours.

Nanaimo Field.

On the Strait of Georgia, at the entrance to Nanoose Harbour, a narrow strip of the brownish-gray sandstone, which belongs to the coal-measures, comes upon the coast at Blunden Point, and strikes along it in a south-easterly direction for six miles, resting on the crystalline series, and dipping north-easterly toward the strait at angles varying from two to fifteen degrees. Further on, these sink beneath the surface of the water, and, concealed by it, seem to turn the point bounding the north side of Departure Bay. In conformity with this they occupy a small island about 200 yards from the shore, just at the entrance of the bay, where they present the character of a conglomerate, the pebbles of which are siliceous, varying from a quarter of an inch to three inches in diameter, while the matrix holds a considerable quantity of carbonate of lime. These beds are interstratified with light drab sandstones, the whole having a thickness of forty feet; dip S. 8° E. $< 17°$.

On the shore, immediately behind the island, moderately fine-grained brownish-gray sandstones are seen, resting on the crystalline series, filling up inequalities in their surface, and nearly conforming in dip with the beds on the island. For a quarter of a mile along the shore of the bay, the sandstones continue, with occasional sharp craggy intervals occupied by the crystalline series, the dip of the sandstones gradually becoming south, and then west of south. Within fifty paces of the last of these sandstone exposures, a rock occurs whi h is composed of a brownish arenaceous matrix so thickly studded with rounded calcareous forms as to constitute an impure limestone. Here, a very little over high water mark, a lime-kiln had been built, and the rock quarried, and burnt for quicklime.

Limestone.

The experiment, however, does not appear to have been very successful, as the kiln is now abandoned.

This impure limestone is visible for about twenty paces, along the strike, and there may be a thickness of it of some ten or twelve feet, in beds of from twelve to eighteen inches. The rounded calcareous forms which stud it were taken on the spot to be water-worn fragments of shells, but, upon microscopic examination of thin slices of them, prepared by Mr. Weston at the museum, Dr. Dawson finds that they contain

Fossils, Cretaceous or possibly older.

hexagonal tabulate coral, like *Stromatopora compacta*; a Bryozoon-like *Escharina*, with square cells; also fragments of *Ceriopora* and of shells like *Inoceramus* or *Pinna*, Cretaceous or possibly older. On the surfaces of some of the beds there were displayed patches, occupying from two to three inches where least, and about a foot in diameter where largest, of yellowish-white calc-spar, rather over a quarter of an inch thick, very much resembling the remains of thin seams of satin-spar. These, upon the microscopic examination of thin slices, were determined by Mr. Billings to be of the genus *Inoceramus* or *Pinna*, belonging to the *Aviculina*. The dip of these beds is S. 24° W. $< 18°$, and opposite them, at a distance of about 100 yards, there are four or five rocky islets, composed of the brownish-gray sandstones, which, having the same dip, would overlie them. The fossils which have been mentioned as probably Cretaceous are of importance, in proving that the coal deposits of Vancouver Island are of that horizon.

Bearing S. 88° W., three miles from the bight of Departure Bay, but how far above the base of the sandstones mentioned is uncertain, there being no exposures in the interval, occurs the Dunsmuir Coal Mine. In a part of the coal-bed, which had been covered with a few feet of clay, a trench six feet wide was being cut at the time of my visit, and had already been extended to fifty yards in a bearing N. 63° E. The thickness in this part was sometimes nine feet and sometimes, perhaps from denudation, reduced to seven feet. At the end of the distance the seam had become covered with about a foot of decomposing argillaceous shale, and was of its full measure, while all the way it rested upon a bed of light drab sandstone, which was quite horizontal.

Dunsmuir Coal Mine.

Nine-feet seam.

Proceeding from the commencement of the trench, in nearly the same bearing as before (S. 88° W.), the surface of the ground gradually rises above the base of the coal about twenty feet, and exhibits a mass of light gray conglomerate-sandstones, with pebbles derived from the crystalline rocks, varying in size up to an inch in diameter. The ground again falls about twenty feet, and in a distance of a little more than a quarter of a mile from the first coal exposure, we meet with a second. This, three or four years ago, was worked to the extent of several hundred tons; and I was informed by Mr. Dunsmuir, Postmaster of Nanaimo, that the

Four-feet seam.

seam is from four to seven feet thick, and like the other, it is so nearly horizontal that, being on the same level, it might readily be supposed to be identical with it; but, according to Mr. Dunsmuir, the one gives a red, and the other a white ash ; moreover, the second one being nearer the run of the coal-measures, and upon strict examination appearing to slope towards it at the rate of about one degree, it may, from some slight increase of inclination in the interval between them, sink beneath it.

Nanaimo Harbour is situated about three miles S. 25° E. from Departure Bay. A sound leads from the one to the other, on the south side of which are Newcastle and Protection Islands ; the latter so named from the shelter it affords to Nanaimo. The northern extremity of Newcastle Island bears a little east of south from the small island which has been mentioned at the entrance of Departure Bay, the distance between the two being about three-quarters of a mile. It presents bold cliffs to the water, which rise to heights of from 100 to 150 feet in some places, and are perpendicular, or even overhanging. These are composed of a coarse conglomerate rock, in which rounded masses of various sizes, up to a foot in diameter, consist of diorite, quartzite and other hard materials, derived from the crystalline series. The breadth of the conglomerate was found to be about a quarter of a mile, and in the cliffs it nowhere shewed distinct stratification ; but on the two sides of the island finer beds which succeed have a slope of nine degrees, comformable, in the direction of the dip, with those at the entrance of Departure Bay. The following ascending section, from the crystalline rocks on which it rests, may be constructed of the coal series in the vicinity :—

Newcastle and Protection Islands.

	Feet.
Brownish-gray sandstone, in beds of from six to eighteen inches, occasionally merging into impure limestone from the presence of calcareous remains of *Bryozoa* and *Aviculina*, such as in the band already described.....	30
Concealed under the water.....	35
Gray sandstones, with beds of fine conglomerate.....	40
Concealed under the water.....	35
Gray conglomerate, with siliceous pebbles, varying in size from a quarter of an inch to an inch, in a matrix of fine sand, and much carbonate of lime.....	77
Concealed under the water, between Small Island and Newcastle Island.....	917
Brownish-gray coarse conglomerate, with rounded masses varying in size from a quarter of an inch to a foot in diameter, consisting of diorite, quartzite and other hard materials.....	211
Gray, fine-grained, thinly-laminated sandstone, separated into beds from half an inch to four inches thick by carbonaceous partings, showing remains of plants as well as of *Inoceramus*.....	37
Black argillaceous shale.....	4
Coal, clean and hard; with a cleavage oblique to the bedding, thin leaves of carbonate of lime filling the cleavage joints in some places ; thickness from three and a half feet to.....	4
Concealed.....	24

Section of the Coal measures

	Feet.
Brownish-gray sandstone	5
Brownish-gray sandstone, holding sub-globular masses harder than the rest of the rock, from the presence of carbonate of lime, of from two to four feet in diameter, which stand out in relief on surfaces exposed to the beating of the sea waves	4
Brownish-gray or light drab sandstones, in beds of from six to eighteen inches, interstratified with bands of conglomerate with pebbles up to two inches in diameter	21
Brownish-gray sandstones with sub-globular masses, as before	3
Concealed	10
Coal, clean and hard, not seen, from the presence of water in the slope which has been opened on it, but said to be from three feet thick to	4
Concealed	17
Gray, thinnish-bedded sandstones, with fragmentary remains of the stems and leaves of plants	3
Gray, fine-grained sandstone, holding iron pyrites disseminated obscurely in small grains in the rock, which crumbles away on weathering	6
Gray fine-grained and finely-laminated sandstones, separated into beds from an inch to a foot in thickness by the presence of thin carbonaceous partings	4
Gray fine-grained sandstone in one bed	5
Gray fined-grained sandstone in one bed	4
Gray fine-grained and finely-laminated sandstones, separated into beds from an inch to a foot thick by thin carbonaceous partings, and yielding excellent flag-stones; on some of the surfaces remains of plants are displayed	12
Gray fine-grained sandstone, which constitutes a good building stone in some places, and in others, from the decomposition of finely-disseminated iron pyrites, crumbles on weathering	16
Gray fine-grained sandstone, in one bed yielding excellent building material	10
	1538

The dip between the two coal-seams of this section is S. 25° E. < 15; but, proceeding across the measures which overlie them, it gradually diminishes, until, at the summit, the strata become nearly horizontal.

Flag-stones and building material.

The gray sandstones of the upper portion yield in most parts excellent material for building and flagging. At the time of my visit, the quarry which has been opened on them was leased by the Vancouver Island Company, on whose claim the coal-seams and gray sandstone occur, to Mr. E. E. Emery of San Francisco, who was raising stone from it for the construction of a United States mint in that city. Six blocks for pillars had been procured from the ten-feet bed, one of which was being dressed

Size of blocks.

into shape for use. When finished the length of the pillars would be twenty-seven feet and a half, with a diameter of three feet ten inches. Mr. Emery was also quarrying flag stones from the twelve-feet bed, from which are obtained very even-surfaced slabs, from one to six inches thick. One of the latter thickness, which I measured, was ten feet square. Both the flags and building stones are easily quarried. The stone dresses freely,

and it will probably preserve its colour, seeing that natural causes have produced little or no change in its tint on exposed surfaces still unquarried. It is not impossible that grindstones may in some places be obtained from this part of the measures. The flatness of the beds gives a considerable area in Newcastle Island to these useful gray sandstones, and extends their distribution to Protection Island to the south of it.

Distribution of the beds.

About a mile south-east from Protection Island, brownish or drab, moderately fine-grained sandstones occur at Sharp Point, and they are seen thence along the coast, almost continuously, all the way to Dodd Narrows, a distance of three miles and a half. The dip varies in direction from N. 39° E. to N. 71° E., and in inclination from twelve to twenty-four degrees. The coast crosses the measures obliquely, gradually gaining higher strata, and there appears to accumulate a thickness of 532 feet. The concealment under the water between Protection Island and Sharp Point, and the increase of dip in the latter locality make it difficult to determine how the rocks in the two are related to one another, and it would scarcely be safe, without more information, to add these sandstones to those in the previous section.

Sandstone of Sharp Point and Dodd Narrows.

Both the coal-seams mentioned in the Newcastle section have been tested by openings. A slope was sunk in the upper one, upwards of a dozen years ago, to the extent, I was informed, of about 120 yards, and coal shipped from it to Victoria. It seems to have been out of working for a considerable time, and the Vancouver Island Company are at present erecting a small steam-engine at the mouth of the slope for the purpose of bringing it into operation again; but when I was there the slope was full of water. The lower seam is in actual working, a small steam-engine standing at the mouth of the slope to haul up the coal. Several schooners and steamers were supplied with coal from it while I was on the neighbouring coast, and several hundred tons were piled on the wharf at the time of my visit to the mine.

Coal-seams on Newcastle Island.

The main working of the Vancouver Island Coal Company, however, is at Nanaimo, on a six-feet seam, about two miles south of the seams on Newcastle Island. Of the measures associated with this seam, Mr. John Brydon, the under-ground manager of the mine, has been so kind as to furnish me with the following descending section, the data for which, having been obtained from a vertical bore-hole, the thicknesses have been reduced by me to measurements perpendicular to the plane of the beds:—

Vancouver Island Company's Mine at Nanaimo.

Six-feet seam.

Section of the measures.

	Feet.
Bluish-black argillaceous shale	11
Brownish or drab, coarse-grained sandstone, holding a few disseminated pebbles up to half an inch in diameter	11
Coal, clean and hard, holding thin leaves of carbonate of lime in the cleavage joints; the thickness varies from two and a-half feet to	6
Brownish or drab, coarse-grained sandstone	65

	Feet.
Gray fine-grained sandstone	75
Coal, associated with from two to three feet of bluish-black shale, the thickness both of the shale and coal being very irregular	7
	175

In the working of the upper seam on the slope it has been found that the dip is N. 54° E., with a very regular inclination of sixteen degrees in the first 350 feet, increasing to seventy and eighty degrees in the succeeding 300 feet; the seam then suddenly rises and dips south westerly at an angle of twelve degrees, on which it has been followed for sixty feet. There may possibly be some variation in the bearing of the dip in the steepest part.

Extent of the workings.

Not having seen any under ground plan, I am unable to state how far the seam has been worked on the strike; but it must now be a considerable distance, as the colliery was first opened upwards of twenty years ago, and has been in operation pretty regularly ever since. In 1860 the produce of the mine is said to have been 14,000 tons, and I was informed by Mr. Brydon that the quantity of coal now daily raised is from 160 to 180 tons as it comes from the pick, which would probably give about 40,000 tons of saleable coal per annum.

Produce of the mine.

Three seams of coal.

In a bearing S. 22° E., a little over a mile from the mouth of the slope, there is an exposure of coal on the coast in which three or four seams of good coal, varying in thickness from a quarter of an inch to an inch, are interstratified in about four feet of black shale, resting on about sixty-three feet of light drab sandstone. The dip in the neighbourhood is N. 32° E. $< 15°$, gradually changing to S. 83° E. $< 7°$, in something less than a mile along the coast.

Seams on Nanaimo River and Dodd Narrows.

Continuing in about the same bearing as before, S. 22° E., for about four miles, two seams of coal are said to occur on the Nanaimo River, about a mile up from the mouth, but I was not so fortunate as to ascertain their thickness or the distance between them. Another reported locality of coal is about a mile south from Dodd Narrows, which would be about four miles south-east from the previous one; but I could gain nothing satisfactory from my informant, of either the thickness or the character of the seam. How these reported seams are related to the Nanaimo coal-beds is uncertain. They may not, however, be far removed from this horizon. On the outside of Dodd Narrows stands the Island of Gabriola. It has a length of ten by an average breath of about three miles, and, judging from an examination across the strike at the north-west end, and along it on the south-west side, the rocks of the island seem to consist almost wholly of brownish-gray sandstone, sometimes becoming conglomerate, particularly on the south-west side. No coal-seams were observed to be associated with the strata. The dip on the outside of the island appears to be north-eastward, with an average inclination of about four degrees. But in Rocky

Gabriola Island

Bay at the north end, towards the west side, there are evidences of a small undulation.

Area of the Nanaimo coal-field.

The area, including all the coal-seams which have been already mentioned as belonging to the Nanaimo field, has a length from the Dunsmuir claim to the end of Gabriola Island of about sixteen miles, with an average breath of about six miles. Its surface would then measure upwards of ninety square miles. In the remaining part of this basin, to the south-east, no important coal-seams, as far as I am aware, have as yet been met with. But little of the region is up to the present known, and there is every probability that the same seams will extend to it.

Valdes and Galiano Islands.

Two long narrow islands, Valdes and Galiano, to the south-east of Gabriola, appear to be a continuation of the same rocks which characterize this area, as far at least as Montague harbour which is near the south end of Galiano. The escarpment along the south-west side of them is seldom less than 200 feet in height, and in one part of Galiano it becomes 900 feet; while the dip, which is north-eastward, is in general moderate. But in Thetis, Kuper and Saltspring Islands, as well as in the smaller ones, called Indian, Secretary, Reid and Hall, the strata appear to be affected by numerous undulations, the dip changing continually both in direction and amount. In the smaller islands mentioned, which have a range parallel with Valdes and Galiano, the strata consist of sandstones, but, at the northern extremity of Saltspring Island, and extending to Saltspring Settlement, a distance of four miles, the sandstones become largely interstratified with black, soft, argillaceous shales, occasionally becoming partially arenaceous. Some of the argillaceous bands are from twenty to thirty feet thick, and these occasionally hold bivalve shells, apparently belonging chiefly to one species; but the shale is of so crumbling a character that it was found next to impossible to preserve a single specimen. Many of the argillaceous bands are from two to five feet thick, separating belts of sandstone, subdivided into beds from two to four inches thick by the presence of shale, varying from mere partings to layers of a quarter of an inch. These sandstones would form excellent flagging, in slabs varying from two to seven feet square.

Undulation affecting the strata.

Sandstone and argillaceous shales

Moresby, Portland and Coal Islands.

Southward of Saltspring Island, or, as it is named upon the chart, Admiral Island, are situated Moresby, Portland and Coal Islands, displaying sandstones and shales belonging to the coal-series. Near the centre of the last named island, about twenty feet of dark gray argillaceous shale are overlaid by seventy or eighty feet of gray sandstones. The uppermost two feet of the shale enclose many fragments of tree stems, impregnated with carbonate of iron, and usually in the form of transverse slices, with sharp edges, measuring from two to eight inches in width and from four to twelve inches in length. Impressions of well formed

* For description of these fossil plants, see Dr. Dawson's note, following Report.

Fossil leaves.

broad leaves, distinctly veined, were abundant on the surfaces of the shale-layers, and in one place there lay upon a surface, and extended in a serpentine manner for a length of some ten or twelve feet, the remains of what appeared to be a root, perhaps in its original site of growth, with a thickness of three-quarters of an inch at one end, and gradually tapering to a quarter of an inch at the other. It appeared to be wholly composed of clean coal; whether any branches proceeded into the shale beneath I could not ascertain. The conditions of the case made it appear as if the supposed root, before denudation, had been imbedded in a thickness of shale just sufficient to cover it. On the immediate surface of this covering portion, there was evidence in a vertical section of the succeeding layer, that patches of coal of seven or eight feet in diameter had lain to the thickness of a quarter of an inch.

Shoal Bay.

About two miles and a half to the westward of this locality, there is another, in North Saanich, about half a mile west of the entrance to Shoal Bay, on the north side, so exactly resembling the one already described that it suggests an identity of horizon. Here, in addition to the remains of stems,

Fossils.

and impressions of veined leaves and root-like forms, fragments of *Inoceramus* are met with in patches. Some of the fragments are eighteen inches in diameter, and occasionally five or six inches thick. In these the shell, which exhibits a transverse fibrous structure, is separated into layers by the interposition of thin leaves of shale, which probably indicates that the thickness is due to an accumulation of fragments, while the layers mark the real thickness of shell in each fragment.

On the same side of Shoal Bay, about half a mile farther west, another similar exposure occurs, with the same sort of remains, with the exception of the supposed roots.

Crystalline rocks.

A large part of Admiral or Saltspring Island, on the south-west side, is composed of crystalline rocks. They may have a breadth of six miles, which is more than half the full breadth of the island. These rocks here separate a cluster of united troughs in the coal-measures on the north-east,

Coal-measure troughs.

from a synclinal form on the south-west. The whole number of these synclinal forms, great and small, may be six or seven, and perhaps more. Valdes and Galiano Islands, with part of Gabriola, seem to be in one; Secretary and Reid Islands in another; Moresby Island in a third; Portland Island in a fourth, which seems to run up to Fulford Harbour,* and to be continued, after an interruption, in Burgoyne Bay; Coal Island and Shoal Bay are in a fifth, and there is possibly a sixth in a very small undulation. These six synclinals as a group are separated from a seventh by a run of the crystalline series, extending seventeen and a half

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On the west side of Fulford Harbour, near Isabella Point, *Inoceramus* again occurs, in black argillaceous shale, dipping N. 32° W., probably shewing a small fold.

miles north-west, and swelling as it proceeds to the breadth given, the seventh having a length of twenty miles from Cole Bay to the foot of Provost Mountain, with a breadth of probably three miles.

Coal seam at Coal Point, Saanich Inlet.

At Coal Point, in the last synclinal form, on the south side of Deep Bay, which is on the east side of Saanich Inlet, there is a seam of coal, from which a few tons have been excavated; but the coal appeared to be a good deal mixed with shale. The seam is thirty inches thick, and dips N. 22° E. < 18°. I was unable to trace it beyond the opening. Three-quarters of a mile on the strike eastward, on the farm of Mr. Cloake, an opening has been made in search of coal; but, although a seam was observable in it, its thickness did not appear to be more than the eighth of an inch.

Thickness of measures in the Nanaimo coal-field.

The numerous undulations which have been indicated in the Nanaimo coal-field, make it difficult to estimate the total volume of the measures. The thickness presented in the Newcastle Island section, from the base to the gray sandstones, is 1,538 feet. As already stated, it would be scarcely safe as yet to add to this the 532 feet displayed on Dodd Narrows; but I am disposed to think that the sandstones of the outside of Gabriola Island, which are the same as those of Valdes and Galiano, are higher strata. In the escarpment in the last named island, we have in one place 900 feet, and for the present it may be safe to suppose that the total thickness of the measures will prove to be at least 2,500 feet.

Salt-springs.

Belonging to the formation, salt-springs occur in the north part of Admiral Island, giving the popular name by which the Island is known in the country. The water has a bitter, saline taste, and is said by Mr. C. Forbes—quoting from Mr. J. D. Pemberton,—to contain 3,446 grains of salt to the imperial gallon; but, not having seen the full analysis, it is impossible for me to form an opinion as to how far the salts giving it a bitter taste, would be prejudicial to its use for the manufacture of salt.

Crystalline Rocks.

Crystalline rocks beneath the Coal measures.

The rocks which come from beneath those associated with the coal deposits are of a decided crystalline character, shewing different aspects in different places. In my examination along the coast south-eastward from Comox Harbour, the first exposures of these which presented themselves have already been alluded to, as dividing the general trough containing the coal-measures, into two parts. They occur between North-west Bay and Nanoose Harbour, forming the coast for between seven and eight miles, and rising up into Notch Hill, which, although only 624 feet in height, is rendered conspicuous by its isolated position. Like the peninsula on which it stands, it is composed of a dark gray diorite, minutely jointed in various directions, causing it in its destruction to fall into small fragments. It extends into several small islands and reefs along the coast,

Diorite.

of which the names are Cottam, Mistaken, Gerald, Douglas and Yeio. On the east side, this diorite seems to be united with a considerable mass of fine-grained syenite, consisting of white quartz and feldspar with black hornblende, with which is associated an occasional small quantity of mica. The presence of this rock is indicated in the Islands of Winchelsea, Rudder Reef, Ada, Southly and Maude. The diorite is projected five miles farther to the south-east, in the tract separating the coal rocks of Blunden Point from those of Departure Bay, and where it is seen at the extremity of this its joints are occasionally invested with yellowish-green epidote. Neither the diorite nor the syenite presented any evidences of stratification.

Fine-grained syenite.

Epidote.

The next locality in which the crystalline rocks occurred was that in which the distribution has already been given, in Admiral Island. The only spot here which I had an opportunity of examining, was in Fulford Harbour, both sides of which shew great masses of a rock composed of bluish-white quartz and feldspar, in which is disseminated a sparing quantity of what appears to be chloritic matter. In that part of the distribution which runs north-westward from between Cape Keppel and Point Isabella, a portion of the breadth rises to the height of 2,329 feet. I am not able to state of what this portion is composed, but to the south-east and south, in the peninsula lying between Saanich Inlet and Haro Strait, and stretching to Victoria, there is a great development of speckled diorite, with much black hornblende, in large masses in the greater part of which no evidences of stratification were observed. On the Saanich road, however, about five miles north-eastward from Victoria, the rock becomes a finely-laminated dioritic gneiss, cut by thin obscure veins holding a small quantity of epidote. Three miles south-east of this, in Cadboro Bay, a similar rock is characterized by the presence of mica. and has a thickness of not less than 150 feet.

Cape Keppel and Isabella Point.

Dioritic gneiss, with epidote.

The general trend of the crystalline rocks, which in Admiral Island appears to be south-eastward, seems gradually to turn to the south-west approaching Victoria, conforming apparently to the shape of Vancouver Island, and limestones frequently present themselves associated with the diorite. The most northern exposure of limestone met with by me is in Cormorant Bay, in Haro Strait, eight miles nearly north of Victoria. Here, running along the shore, which is nearly north and south for about 500 paces, there occurs an exposure of limestone, darkish-gray and very finely-crystalline in some places, and in others bluish-white and of an impalpable grain, with a conchoidal fracture. The arrangement of the colours is difficult to understand, as the stratification appears to be obliterated. Both of these limestones hold forms which Mr. Billings is inclined to consider organic. In the dark gray variety they appear like irregular cylinders and fragments of shells which have been silicified, and are weathered into relief on the surface; while in the bluish-white, similar forms,

Crystaline limestones.

Fossils.

without silicification, appear of a whiter colour than the matrix, and are also slightly weathered into relief with a shallow furrow close around them. The whole of the forms are too much obscured by distortion to be determined. In some parts both the limestones become intermixed with epidote, the quantity of which gradually increases on receding from the water, while the limestone diminishes, until at last, the whole rock is epidote, of which in some places there is a thickness of twenty feet. Beyond this the epidote gradually becomes intermixed with diorite, and again diminishes until the rock is all diorite, while still farther on, the rock is a diorite of the speckled variety already mentioned, but the junction of the two diorites is concealed. In the passage between the limestone, and the epidote, the rock in some places is marked by the occurrence of small quantities of copper pyrites.

Copper pyrites.

On the Saanich road, about a mile south of the dioritic gneiss which has already been alluded to, there occurs another exposure of limestone, in a vertical bed of eight feet thick, which was traced S. 68° E. for half a mile, and in an opposite direction at intervals for a quarter of a mile. It is a brownish-gray compact rock, of impalpable grain and conchoidal fracture. The rock in contact with the limestone on the north side is a speckled diorite, exposed in some places for a breadth of 200 paces, and probably more; while on the other, at ten paces from the limestone, diorite occurs, which is exposed for an equal breadth.

Limestone bed eight feet thick.

About a mile and ahalf from Victoria, to the east of the same road, limestone occurs on the farm of Dr. Tolmie, who has burnt it for quicklime. It is of the same colour and character as the previous band. Only a small amount of the rock is exposed. In the immediate vicinity of the limestone the rocks are concealed; but, about three hundred paces to the north there is a band, 100 feet thick, of bluish-white quartzite, weathering to a yellowish colour. To the south and south-east of it, diorite forms a low range of hills which continue half way to Victoria, and there are occasional exposures of the same rock in Victoria itself.

Quartzite.

The fourth locality in which limestone occurs is less than a mile west of Victoria, on the north side of the entrance to the harbour. It appears in a small cove, where it rises about ten feet above the water, and runs about twenty paces along the bank, in which it is overlaid by clay. Its dip or strike could not be determined, but it is compact and of a mottled-gray. On going south the limestone gradually becomes impure and merges into a diorite, which is the prevailing rock in the neighbourhood.

A fifth locality of the rock is about three miles and a half west of Victoria, on the east side of Esquimalt Harbour. The exposure extends for about 100 paces on the strike, which on the average is N. 82° W., and has a breadth of from twenty to thirty paces. In some places it is confusedly mixed with diorite. It is gray in colour, somewhat crystalline in

Limestone on the east side of Esquimalt Harbour.

texture, and holds a great quantity of siliceous grains, and some forms which seem to be silicified fragments of Encrinal columns. Immediately north of the limestone, the rock is diorite of the same speckled character already mentioned.

Silicified Encrinal columns.

A sixth locality is in the same bay, about a mile farther west, where there is a bluish-white limestone of an impalpable grain, and having a conchoidal fracture. It has a thickness of ninety feet, and shows thin closely-joined beds, dipping S. 24° E. $<70°$. It is traceable on the strike for about 200 paces. Speckled diorite is seen within a few yards of it, both above and below, that below being visible for a breadth of fifty or sixty yards.

In a seventh locality, about half a mile north of the last, a limestone, of the same character in every respect, occurs, with an exposed thickness of forty feet, which is probably not the full amount. The rock immediately south is speckled diorite, of the same character as the last, and the band of limestone is probably a repetition of the previous one, on the opposite side of a synclinal. It has been burnt for quicklime in both localities.

On the west side of the same bay, from one to two miles southward of these two localities, you have yourself observed the eighth exposure, where a compact bluish-white limestone with a conchoidal fracture occurs, very similar to the bluish-white limestone of Cormorant Bay. The specimens from it seem to show that, as in the case of the Cormorant Bay rock, it becomes greatly mixed with epidote, which, apparently, in some places becomes interstratified with it, and constitutes a large part of the mass.

A ninth locality is met with about a mile west of the sixth and seventh exposures. The limestone is gray and crystalline, and holds many siliceous grains and forms similar to those already mentioned as occurring in the fifth locality. The exposure has a breadth of twenty-four paces in a bearing N. 87° E. It in every respect so thoroughly resembles the limestone of the fifth locality, that specimens from the one cannot be distinguished from those of the other, and there can be little doubt of the identity of the bands.

Identity of the bands exposed in the fifth and ninth localities.

In the tenth locality, which occurs about three-quarters of a mile northward from the last, the rock is a bluish-white compact limestone with a conchoidal fracture. It has a strike of S. 78° E., across which is the following horizontal section going northward :—

	Feet.
Bluish-white compact limestone, with a conchoidal fracture.....	24
Dark-gray or blackish hornblendic rock, soft but hardening on exposure, cut by a multitude of thin veins of epidote, running in all directions intersecting one another.....	35
Bluish-white compact limestone as before.....	38
	97

Knockan Hill limestone.

In the eleventh locality, which is the last, at Knockan Hill, nearly one mile from the head of Victoria Arm, or about four miles from Victoria

itself, the rock is again a bluish-white compact limestone, with a conchoidal fracture, and has a visible breadth of twenty paces, which may not be the full thickness. It is in contact with speckled diorite on the south side, which has there a breadth of 200 or 300 paces, but its associations on the north are concealed by drift. The strike is E.and W., and in this direction it is traceable for 1,200 paces, at the end of which it is on the land of Mr. Robert Anderson, and close to Colquet River.

It seems probable that these limestones will resolve themselves into at least three bands; one, to which will belong the bluish-white compact variety; another, the gray crystalline variety, with the supposed silicified fossils; while the third will comprehend the epidotic limestone. The second sixth, seventh, tenth, and eleventh localities will probably belong to the first of these bands, which we may call A. The fifth and ninth localities to the second band, B, and the third band, C, will comprehend the first and eighth localities. The third and fourth localities must for the present be left out. It may be conjectured that the sixth and seventh exposures are on the opposite side of a southern fold, while the tenth and the eleventh, continued to the first, are on the opposite sides of a northern and parallel fold in A; that B, running conformably on the outside of A, shows itself on the opposite sides of the southern fold in the fifth and ninth localities; and that C, running on the outside of all, displays itself on the south side of the southern fold and on the north side of the northern fold, in the first and eighth localities. The whole, therefore, may be conjectured to belong to an anticlinal or synclinal form, the evidence not being sufficient to say which, with a double fold subordinate to it. I have been informed that there are many more exposures of limestone in the neighbourhood than those I have seen; and, by the future study of these, and perhaps of some fortunate locality connected with the supposed fossils, not only the structure, but possibly the age of these crystalline rocks may be made out in this part of the country.

Superficial Deposits.

Superficial deposits, of sand and gravel.

Deposits of stratified clay, sand and gravel are very extensively spread over the rocks belonging to the coal series. With the exception of escarpments towards the base of this series, almost all the exposures of coal rocks were observed only where the drift had been swept away at the margin of the sea, or in channels of streams. Sections of the drift were scarce, and I have only a few examples from which to form an opinion of the general character of the superficial deposits. They consist generally of a grayish-brown clay, mixed with sand, sometimes becoming gravelly with well rounded pebbles, derived from the crystalline rocks, from a quarter of an inch to an inch in diameter. In some places the clay is free from sand, and in others sand prevails, and is usually marked by false bedding.

False bedding

Thickness.

The greatest thickness that came under my observation was in a cliff forming the coast part of the way between Comox Harbour and Cape Lazo, or Point Holmes. The estimated height was about 150 feet. The lower part is composed of good brick-clay, with very little sand. Layers of sand gradually become more prevalent on ascending, while toward the top the sand predominates, and shows occasional rounded pebbles. In Cormorant Bay there is a cliff of a similar character, but its greatest height is not more than 100 feet.

Brick-clay.

To the east of Beacon Hill, which is on the coast just south of Victoria, a cliff, extending a mile, is composed of from fifty to eighty feet of clay, with a small mixture of sand throughout; and, from a similar looking clay, red bricks are made on the west side of the Saanich road, about half a mile from Victoria.

Soil resting on the drift.

The drift in general presents horizontal layers, which in a multitude of places are worn into gentle inequalities. Throughout the country it is covered with an unconformable mantle of black soil, consisting of from two feet six inches to four feet of an earth, apparently, containning a large proportion of vegetable matter. This soil is probably marine, seeing that the

Sea shells.

lower layer from six inches to a foot in thickness, holds sea-shells sometimes, crowded together in great quantities. Owing to the loss of the gelatine, they crumble on being handled, and perfect specimens are, therefore, difficult to collect. The highest position in which the shell-bed was observed is to the east of the Saanich road, about five miles from Victoria. It occurred in a slight depression, at a height of about 300 feet above the sea; but it is not improbable that it may be met with at still greater heights in other places. Some of the shells appear to me to be the same as the recent species.*

Erratic blocks and ice grooves.

In all the area examined by me on and about Vancouver Island, erratic blocks were only occasionally observed. Ice grooves were remarked on the beach, below Beacon Hill, near Victoria, running S. 27° W.

Character of the soil.

The vegetable soil, which has been mentioned, seems to be of a very productive character, and, whether in the forest, the field or the garden, appears, aided by the favorable climate of the country, to yield great returns. In the Comox district, about 140 miles from Victoria, as already stated, this soil is spread over a considerable area of prairie country, commonly designated *openings*, extending from the coast up the different branches of the Courtnay River for seven or eight miles. The surface of this district, which is naturally free from timber, with the exception of single trees and

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A few of the recent shells were collected on the coast, and Mr. Whiteaves, Secretary of the Natural History Society, has kindly determined them for me. They are as follows:—*Mytilus Californianus*, *Cardium corbis* (=*Nuttalii*), *Saxidomus opacus*, *Tapes staminea*, *Macoma inconspicua*, *Natica russa*, *Lunatia Lewisii*, *and Purpura crispata*.

clumps, chiefly of oaks (*Quercus Garryana*), and strips of alder (*Alnus Oregona*) in the bottoms, may be some twelve square miles, the scenery being picturesque and park-like. Its margin is very irregular in shape, and it is surrounded by a growth of very heavy timber, among the trees of which are the Douglas Spruce (*Abies Douglasii*), often attaining two feet in diameter and 200 feet in height, in one half of which it is free from branches, and the cedar (*Thuja gigantea*) often equally large. The open country, in its natural state, is mostly covered with a growth of ferns, which sometimes attain a height of ten feet, with stems three-quarters of an inch in diameter, and roots descending to a depth of three feet. These roots the native Indians prepare in some peculiar way for winter food, and excavate deep trenches to obtain them. The farmers are under the necessity of grubbing up the fern roots before the ground is ready for use, and they are often voluntarily assisted by their pigs in this operation, these animals, it is said, relishing the fern root as food.

Fern roots used for food by the Indians.

I was informed by Mr. John Robb and Mr. George Macfarlane, two settlers of the district, that the average yield of the land, after it is cleared and thoroughly under cultivation, is

Crops.

Of Wheat from 30 to 45 bushels per acre.						
" Barley	"	40	" 45	"	"	"
" Oats	"	50	" 60	"	"	"
" Pease	"	40	" 45	"	"	"
" Potatoes	"	150	" 200	"	"	"
" Turnips	"	20	" 25	tons.	"	"

Some of the turnips exhibited by Mr. Robb at the agricultural shows are said to have been remarkably heavy, but those of the Swedish and yellow varieties seen by me, I considered rather small. The season, however, was said to be an unusually dry one. The yield of Timothy hay is about two tons per acre. Clover thrives well, and rye grass is valued for its after-crop. The yield of butter per cow, after calf-feeding, is about 150 lbs annually; the ordinary selling price being 40 cents per pound. Cattle require generally to be house-fed from the beginning of December to the middle of April. Snow seldom lies long. Heavy falls sometimes occur, but generally disappear in a few days. Once or twice snow has remained on the ground for two months.

Apples, pears, cherries, plums, white and red raspberries, red, white and black currants, and most kinds of fruit thrive remarkably well. Some apples, of which I obtained a sample, measured thirteen inches in circumference, and weighed nineteen ounces, they were highly flavoured, and well adapted for eating and cooking; of the pears, many measured eleven inches in circumference, and were highly flavoured and juicy.

Fruit.

On Gabriola, prairie lands or openings occur, such as those already described at Comox. More of them are met with on Saltspring Island, but

Prairie lands on Gabriola and Saltspring Islands.

in neither place of the same extent as at Comox. Mr. Griffith, one of the settlers at Salt Springs, informed me that fall wheat thrives well there, and yields from thirty-five to forty-five bushels per acre. Of other grains the yield seems to be about the same as at Comox. In Mr. Griffith's garden there was a large plot of common winter cabbages, the solid heads of most of which measured from three to four feet in circumference. Red cabbage and cauliflowers were equally large and sound. Carrots and parsnips were large, as well as onions, and there was an abundance of tomatoes of several varieties; of gooseberries, which did not seem to thrive so well at Comox, Mrs. Griffith informed me that at Salt Springs the bushes gave a crop equal in quantity and quality, to the best English. The crops of all the varieties of currants and raspberries vied with those of Comox.

Fine vegetables and fruit.

Mr. Griffith's orchard occupies about two acres, and has been set out only three or four years. I saw different varieties of apple, pear, peach, plum and cherry trees, and the proprietor informed me that all kinds bore fruit last year. The apples are of excellent quality, and the pears, though not large, were equal in flavour and juiciness to any I had ever tasted.

Fowls and eggs.

Mr. Griffith has about three hundred barn-yard fowls, which are fed on the grain of the farm, and enable him to supply a great abundance of eggs to the Victoria and Nanaimo markets, where they sell for from 25 to 40 cents per dozen.

Pumpkins at Fulford Harbor.

At Fulford Harbor Mr. Theodore Frago showed me a pumpkin of the mammoth variety, which measured thirty-two inches in length, with a diameter of fifteen inches at the small end, and twenty-two inches at the other, and he informed me that larger ones had been used before my arrival.

Beautiful farms on the *oak-openings*.

The settlements of North and South Saanich, as well as of other districts near and around Victoria, show a good deal of prairie land. From the abundance of oak trees on these lands they are known in this part of the country as *oak-openings*. In them many beautiful farms are met with, and their soil and aspect resemble those of Comox. In addition to the grain, fruit and vegetables, enumerated elsewhere, the hop vine has been introduced in North Saanich, and in the neighborhood of Victoria. In the former place, Mr. Isaac Cloake and Mr. Henry Wain, with some others, have each a *hop-orchard*, as it is there termed, of several acres in extent. Mr. Cloake, who spent nine years among the hop-fields of Kent, in England, informed me that his hops are quite equal, if not superior, to the English, which, according to him, was tantamount to saying that they were the best on the face of the earth; and Mr. Wain, who likewise had practical experience, stated that in regard to aroma they were equal to the best he knew. They are of the variety called the grape-hop. It was introduced from California, and is said to have greatly improved in British Columbia. The yield of hops is here from 1,000 lbs. to 1,700 lbs. to the acre, and they bring in the

Hops.

Victoria market from 22 to 60 cents a pound. When railway communication is established, the article will probably become one of trade between British Columbia and the Eastern Provinces.

The following report on a sample of a few pounds of these hops which I brought from Vancouver Island, grown within a mile of Victoria, has been furnished by Messrs. William Dow & Co., of Montreal, and must prove highly satisfactory to the growers.

Montreal, 13th May, 1872.

Report on sample of Vancouver Island Hops.

"DEAR SIR,—At your request we have much pleasure in reporting upon the hops of British Columbia, a sample of which you favored us with.

"In our opinion they are of very superior quality, rich and fine in aroma. These hops resemble the Californian, and would be equally sure to find a ready sale in this or other markets at the highest rates; they have been well dried, and are in first-rate condition. Our estimate of the value of these hops is that they are worth fully 10 cents per lb. more than the best Canadian growths, the prices of which during the past season ranged from 50 cents to 70 cents per lb., according to the demand, exceptionally high prices however."

Yours faithfully,

(Signed,) WM. DOW & CO.

Settlements between Saanich and Nanaimo.

Other settlements of a similar character to those described are established between Saanich and Nanaimo, but I had no opportunity of visiting them. Near and around the farms which I saw, rocky hills rise up, in many places to heights of 1,000, 2,000, or even 3,000 feet and more, the surface of which is in some parts craggy, but in others presents patches with a thin soil, covered with a fine, short but thick grass, on which sheep and cattle thrive well; all those I saw there appeared to be in good condition. The temperature is cooler in such places than in the lower and more level country, and during the heat of summer they afford excellent pasturage, which will much assist agricultural industry.

Along the coast, and in the interior of Vancouver Island, as well as on the shore of the Archipelago surrounding it, equally good farming localities will be discovered, and hereafter become the homes of thousands of hardy and industrious people.

I have the honor to be,

Sir,

Your most obedient servant,

JAMES RICHARDSON.

Note by Dr. Dawson on the Fossil Plants referred to in Mr. Richardson's Report.

Note on fossil plants by Dr. Dawson.

The specimens are not numerous, and most of them are very imperfect. They are principally from beds associated with coal at Nanaimo and North Saanich. They belong to a flora which has occasioned some controversy. It was originally described by Lesquereux * and Heer as Tertiary, being indeed very nearly allied to that of the Miocene of Europe. Newberry, however, on the evidence of the associated marine fossils, and on the analogy of the Cretaceous flora of Nebraska, † regards it as of the latter age, and this is, I believe, the view more generally adopted. The present collection is too imperfect to throw much light on these questions, and it will be better to await the arrival of larger collections before describing any of the species which it contains. It may be anticipated, however, that the investigations of the survey will develop very interesting facts with regard to these plant-bearing beds of Vancouver Island and the associated coals.

In the meantime the following list may serve to indicate the more important genera recognised in the collection:

List of genera of fossil plants.

No. 1.—*Tæniopteris, ?* N.S. Distinct from T. Gibbsii, of Newberry, Nanaimo.
" 2.—*Taxodium cuneatum*, Newberry, do
" 3.—*Sequoia Langsdorffii*, Heer, or allied, do
" 4.—*Sabal* (fragments of leaves of a fan-palm). do
" 5.—*Palmacites*, fragments of leaf, North Saanich.
" 6.—*Populus*,
" 7.—*Quercus*,
" 8.—*Platanus*, } Fragments of leaves, do
" 9.—*Cinnamomum Heeri*, Lesq., do
" 10.—Indistinct fragments of wood, Union Mine Comox.
" 11.—*Taxites*, belongs to a Taxine tree, possibly *Salisburya*.
" 12—*Cupressinoxylon*. Other specimens from Vancouver Island, Coal Island and North Saanich have the structure of Cypress, and belong to two or three species.

Analyses of Coals and Crystalline rocks from Vancouver Island, by Dr. T. Sterry Hunt.

Analyses of coal, and of crystalline rocks.

Of the eight specimens of coal, numbers I. to IV. were, you informed me, from the outcrops of seams, and, consequently, much modified by the weather.

I. Beaufort Mine, Comox.
II. Union Mine, Comox, 10 feet seam, very much weathered.
III. Baynes Sound Mine, Comox, upper seam, somewhat weathered.
IV. " " " " lower seam.

* Silliman's Journal, Vol. XXVII.

† Fossils plants collected by Mr. G. Gibbs, and Report on Yellowstone and Missouri Expedition.

V. Nanaimo Mine, upper seam. Vancouver Island Coal Company.
VI. Dunsmuir Seam, Nanaimo.
VII. Newcastle Island, lower seam. Vancouver Island Coal Company.
VIII. Locality uncertain, supposed from Nanaimo, marked "lower 7-feet seam."

The results obtained from these by slow coking were as follows:

	I.	II.	III.	IV.	V.	VI.	VII.	VIII.
Fixed Carbon	55.75	54.57	57.48	64.70	51.45	55.50	52.57	59.29
Volatile	29.30	23.83	29.10	29.55	38.40	34.70	35.49	27.63
Ash	14.95	21.60	13.42	5.75	10.15	9.80	11.94	13.08
	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

I. of the above, gave a bulky soft coke, with a fine gray ash;
II. scarcely coked, and gave a coarse gritty ash;
III. gave a firm dense shining coke, with gray ash;
IV. a firm coke, with a fine reddish ash;
V. a firm coke, with a grayish ash;
VI. and VII., like II, scarcely coked, and gave a soft gray ash;
VIII. gave a firm coke and a fine gray ash.

Lignite.—A specimen of lignite from North Saanich, Vancouver, was remarkable for being in great part replaced by carbonate of lime. It was a part of a flattened trunk or stem, measuring two by four inches, and was black, brittle and devoid of lustre; but was coated with true coal, apparently derived from the epidermal tissues. The powder of the ligneous interior was dark chocolate-brown in color, and, when exposed to heat in a close vessel, gave off a vapor with an aromatic odor, burning with a bright flame. The black residue, by calcination at a low temperature, became grayish-white, and was chiefly carbonate of lime with a little magnesia. Lignite.

The analysis of a specimen gave as follows:

Carbonate of lime	79.00
Carbonate of magnesia	7.78
Iron and alumina, traces	
Insoluble siliceous matter	1.50
Volatile matter	3.35
Fixed carbon	7.00
	98.63

The following are notes on various rock specimens:

No. 18 is a fine-grained grayish hornblendic gneiss or granite, consisting of white orthoclase, white quartz and greenish-black hornblende. From Maude Island, Georgia Strait. Rock specimens.
No. 33 is a gneissoid diorite composed of a white triclinic feldspar, with greenish-black hornblende and a little light brown mica in layers. From Cadboro Bay, near Victoria.
No. 44 diorite, contains the same elements as the last, but more hornblende. Anderson's farm, near Victoria.
No. 47 diorite, like the last, but finer grained, gneissoid. Near Beacon Hill, Victoria.
No. 41 diorite, fine-grained, gneissoid. East Saanich Road.

No. 45 diorite, gneissoid, with greenish-white feldspar, vitreous white quartz, and greenish-black hornblende. Victoria.

No. 63 diorite, greenish, fine-grained, almost impalpable; with compact pale green epidote in the joints. From Departure bay.

Supposed serpentine from Esquimalt Harbour.

Another specimen of a similar fine-grained diorite from the west side of Esquimalt Harbor, which had there been called a serpentine, was found to be somewhat calcareous. When the carbonate of lime has been removed by a dilute acid, the residue is somewhat attacked by strong acids, which remove portions of alumina and lime, showing a feldspar related to labradorite in composition.

The analysis of the rock freed from carbonate of lime gave as follows:

Silica	54.10
Alumina	18.70
Protoxyd of Iron	9.18
Lime	3.58
Magnesia	4.97
Potash	1.10
Soda	4.51
Volatile	3.60
	99.74

The presence of a considerable amount of water shows that the rock contains a hydrous species, probably something like chlorite or delessite, containing alumina, so that any attempt to calculate the mineralogical constituents of the rock from the results of analysis, would be of little value. It is a hydrated, chloritic, feldspathic rock, probably containing also a hornblendic element.

No. 27 is quartz, holding only a little chloritic matter, penetrating and coloring it. Fulford Harbor, Saltspring Island.

No. 45 is an impure quartz rock, penetrated like the last by some greenish coloring matter. Dr. Tolmie's farm, near Victoria.

REPORT

ON THE

COUNTRY BETWEEN LAKE SUPERIOR AND THE ALBANY RIVER,

BY

MR. ROBERT BELL, C.E., F.G.S.,

ADDRESSED TO

ALFRED R. C. SELWYN, ESQ., F.G.S.,

DIRECTOR OF THE GEOLOGICAL SURVEY OF CANADA.

MONTREAL, April 17th, 1872.

SIR,—I beg to report the progress made during the past season in the geological survey of the country lying to the north-west of the great lakes, with the investigation of which you have done me the honor to entrust me. The Thunder Bay and Lake Nipigon regions were examined and reported upon in 1869, and the country lying further east, including Long Lake and Pic River, was worked out in 1870, and described in my report to you for that year; while the section explored last season lies mostly to the northward of both of these tracts.

Region examined.

Not having been able to leave Collingwood until the 1st of July, our operations in that northern latitude were necessarily much retarded by the lateness of the season, and it was the 23rd of November before we again reached Collingwood. Owing to the unusually great demand for men for parties of explorers and others who had gone to the woods just before me, I found it very difficult to get together a suitable party; but, notwithstanding these drawbacks, I am happy to be able to report a very satisfactory season's work. I may be here allowed to express my obligations to my assistant, Mr. Geo. F. Lount, to whose energy and interest in the work our success was largely due. I have also again to acknowledge our indebtedness to all the officers of the Hudson Bay Company, with whom we came in contact, for their kindness in aiding us in our labors.

Party.

Acknowledgment of aid.

In geological work, such as that allotted to me last year (consisting principally in ascertaining the geographical distribution of the rock formations), the results are best shown upon a map, and for this purpose I have, during

Plans shewing results.

the winter, laid down all our surveys on a scale of half a mile to the inch, and recorded our geological notes upon the face of the plans. In the present report I shall, therefore, merely endeavor to give a summary statement of the work done, and a general description of the country examined.

Nipigon region.

One of the duties assigned to me being to ascertain, if possible, the relation of the Upper Copper-bearing Rocks to other formations to the northward, we entered the country by way of the Nipigon River, and proceeded to make surveys to the north-west, north and north-east of Lake Nipigon. The first of these was by way of the Wabinosh River and chain of lakes, which together form the canoe-route to Osnaburgh House; the second was by the Pikitigouching River, and was performed by Mr. Lount; while the third was by the Ombabika River. On our way to the country north of Lake Nipigon, we had opportunities of adding somewhat to the geological knowledge of that country gained while making the survey of 1869, and also of perfecting, to some extent, our topographical plan of the region.

South Bay.

Having been detained by head wind for a few days at Flat Rock Portage, I made a survey of the shores of South Bay, and, while doing so,

Small outlet.

discovered a small discharge flowing from Lake Nipigon by way of Lake Hannah. It consisted, at the time of our visit, of a brook large enough to drive a mill, but was dry in 1869, owing to the water in the lakes having then been about three feet lower.

Traverse of Lake Nipigon.

A traverse was made from island to island across the main body of Lake Nipigon, from Nipigon House to the mouth of the Ombabika River, the distances having been ascertained by Walker's patent log, and bearings taken from numerous points, which have enabled me to make a more complete map of the islands in the centre of the lake.

Having ascertained that the best route for a further examination of the country was from the head waters of the Ombabika River, we continued thence, northward, all the way to the Albany River, surveying our course as we went. On reaching the Albany, we turned down stream, and surveyed the river to the point where it is joined by the Kenogami or "English" River, a distance of one hundred and eighty-four miles. Here we turned southward, up the Kenogami River, and surveyed it as far as Pembina Island, which I had reached the previous year from Long Lake; so that we have now completed two distinct lines of survey from Lake Superior to the Albany and also surveyed the intervening portion of that river.

Two lines from Lake Superior to Albany River.

Summary of surveys.

The following list shews the distances actually surveyed, without including side explorations or geographical features fixed by triangulation:

	Miles
New traverse of Lake Nipigon	34
Route northwest from Lake Nipigon by Wabinosh River	33
Pikitigouching River	30

	Miles
From Lake Nipigon to the Albany River	142
On Albany River, to the mouth of Kenogami River	184
Kenogami River from its mouth to Pembina Island	99
Total number of miles of new survey	522

These surveys were made by means of the Rochon micrometer and the prismatic compass, with the exception of the traverse of Lake Nipigon, where the distances were ascertained by means of Walker's patent log, and a small section of the Kenogami River, just below Pembina Island, where they were determined by pacing along the banks of the stream. Where the line of our survey passed through lakes, their correct dimensions and forms were ascertained by triangulation and other means, as accurately as our time would permit. The latitude was taken every day, if the state of the weather allowed, and a regular record was made of the reading of the barometer, at least twice a day, for the purpose of comparison with another record which was kindly kept for us at Nipigon House by Mr. Crawford and Mr. Henry De la Ronde, with the view of ascertaining general levels. Comparative levels were taken at all falls and rapids, and at portages between lakes, and the heights of hills or mountains were ascertained whenever we had opportunities. Throughout the region examined, the magnetic meridian corresponds nearly with the true north and south, but the amount of variation was ascertained as often as was considered necessary. Observations were also made with the view of determining the volume of water discharged by the principal rivers. Some of the rivers, of which we surveyed portions, may yet prove valuable for the purposes of navigation, although even their existence appears to have been unknown, except to the few Indians and fur-traders who inhabit the country. We made frequent notes of the temperatures of the rivers and lakes, and of the nature of the vegetation, as being the best means within our reach of judging of the climate of the country we travelled through. We also took care to register any notes, both from original observations and the information derived from the inhabitants of the country, which appeared likely to enable us to furnish useful information of any kind in regard to this great region.

Mode of surveying.

Observations.

Levels.

Navigable rivers.

Other notes.

Additional notes on the Geology of Lake Nipigon.

Some of the geological notes made while we happened to be on Lake Nipigon may be worth mentioning here, to supplement the geological description of the lake contained in my report of 1869. The red quartziferous feldspar-rock, which is there described (page 348) as occurring near Nipigon House, was found on the west side of Dog Island opposite the Post, where it forms a cliff about forty feet in height, divided by joints into large perpendicular columns. The stratigraphical relation of the prevailing trap of

Geology of Lake Nipigon.

Lake Nipigon to these rocks and to the sandstone of the same neighborhood was not clearly made out; but, at the locality just described, the dark-colored trap is seen, apparently overlying the other rock, which, in one place, is cut by a small dyke of the trap. In the same locality, and on a higher level than either the trap or porphyry, there is a bed at least five feet thick, of a soft grey magnesian rock, dipping northward at a low angle.

Nipigon House. The eastern slope of the hill, which rises above Nipigon House to a height of about 200 feet, is composed of a feldspar rock, similar in lithological character to that above referred to, but occurring in beds, some of which are thin while others are massive, all dipping N. N. W. at angles varying from forty to sixty degrees. Many of the beds shew well marked diagonal stratification. This rock may have a thickness of 800 or 1,000 feet, and is followed by the dark-colored trap, apparently in beds having the same dip, and which form a cliff seventy or eighty feet high at the summit of the hill.

Inner Barn. On the southern point of the Inner Barn, in Wabinosh Bay, I discovered, near the water's edge a section of about ten feet of mottled, green and purple, shaly, arenaceous limestone, dipping easterly at an angle of 15° or 20°. Beds of a purer limestone, having a grey and greenish color, mottled with purple patches, are interstratified with the others; and fragments derived from them are strewn in abundance upon the beach, and may prove of value for burning into lime. None of the beds were observed to contain fossils. The common trap, having a vertical columnar structure, rises to a height of 520 feet (by barometrical measurement) immediately above these unaltered sedimentary deposits. Some loose fragments of fine-grained, light-grey sandstone, and large worn gneiss boulders were found lying upon the rounded surface of the trap on the highest part of the island.

In going from Nipigon House to the Ombabika River, the only rock found *in situ*, on any of the islands examined, consisted of the common dark trap; but on one lying about seven miles north-east of Nipigon House there are many very large angular masses of thick-bedded, greenish-grey

Sandstones. and reddish, rather fine-grained, hard, quartzose sandstone, and others of a mottled green and grey color, derived from thinner beds. The rock was not found in place, but from the abundance and angularity of these large masses, it cannot be far off. The Indians report one of the islands lying off the south Peninsula of Ombabika to be composed entirely of sandstone, and Mr. McKellar found this rock *in situ* in several places on the main shore of this peninsula. (See Report for 1869, page 344.)

I was shewn specimens of iron pyrites by Indians who said that they obtained it on Medicine Lake on the Red Paint River, which enters the east side of Lake Nipigon, and at another locality near the mouth of the same river; also of a slaty iron ore from the east side of the lake. Specimens

of a similar ore but of a poorer quality, from a point on the Sturgeon River a short distance above Poplar Lodge, were shewn me by Mr. H. De la Ronde.

Survey of Wabinosh River.

The survey by way of Wabinosh River and the lakes beyond the height of land, began at the outlet of Wabinosh Lake, one mile from Lake Nipigon (to which Mr. McKellar had surveyed it in 1869), and extended to a point twenty-nine miles in a straight line from the head of Wabinosh Bay, or thirty-three miles following the canoe route. In this distance we made nineteen portages, and passed through eighteen lakes, the largest of which are Wabinosh and Round Lakes, each three and a-half miles in width, and Oval-rock Lake, four miles in length. The south branch of the Wabinosh River enters the south-west angle of the lake of the same name, and is a larger stream than the north branch, which we followed. A portage which occurs on this route between Clear and Oval-rock Lakes, at a distance of twenty miles in a straight line from Wabinosh Bay, the Indians told us was on the height of land between the waters of Lake Nipigon and the Albany River, although the water of the next lake to the north-west of Oval-rock Lake flowed into the latter. The surface of Clear Lake has an elevation of thirty feet over Oval-rock Lake, and of 100 feet over the lake to the south-east of it, into which it discharges. Wabinosh anoe-route.

For a distance of ten miles from Lake Nipigon, or around Wabinosh and Round Lakes, the country has the same mountainous aspect as about Wabinosh Bay, the trap hills rising from 200 to 500 feet above the level of the water, and often presenting perpendicular cliffs. The same kind of trap prevails as far as the height of land, beyond which gneiss was the only rock seen, with the exception of a ridge of dark grey crystalline trap, running in a north-westerly course, near the furthest point which we reached. The general attitude of the trap beds appears to be horizontal. The stratification is particularly well seen about the outlet of Round Lake, where the bluffs, viewed from a short distance, resemble cliffs of thinly-bedded limestone. Aspect of the country. Stratified trap.

A small island in the middle of Round Lake consists of a dark red, coarsely crystalline rock, composed of red feldspar, green hornblende, and a little mica, quartz and magnetic iron. For a distance of four miles north-west of Round Lake, a dull red granite is met with almost everywhere along the lower levels. A small exposure of grey contorted gneiss occurs, however, at one place three miles north-west of this lake. At the eighth portage, which is about fifteen miles from Lake Nipigon, a breadth of about 200 feet is occupied by altered sandstone and a hard, compact, dark grey, siliceous rock, which is full of straggling veins and patches of uncrystalline red feldspar ; and in one place this mineral is associated with large aggregated Geology of Wabinosh route.

crystals of green hornblende, mixed with calc-spar. On the north side of this band the rock is dark trap with numerous specks of magnetic iron; while on the south side, a compact, hard, red, splintery, quartz and feldspar rock occurs. Beyond the height of land, the gneiss, which is the rock of the country, as far as we went, presents nothing remarkable to note. Proceeding north-westward, it first dips N. E., then E. and finally S. E.

Glacial striæ. The direction of the glacial striæ along this route varies from S. 15° E. to S. 30° W.

Moraines. Moraines of boulders, having a southerly course, are conspicuous on both sides of Round Lake.

Soil. The country which we passed through by the route just described, is generally rocky and of little value for agricultural purposes. The only good land which came under our observation was on the west and north sides of Wabinosh Lake, where the soil consists of fine sandy and clayey loam.

Survey of Pikitigouching River.

Pikitigouching River. The Pikitigouching, or Little Muddy River, flows into Windigo's Bay in the northern part of Lake Nipigon. In 1869 we measured four and a-half miles of this stream, and last year nearly thirty miles more were surveyed by Mr. Lount. Although the highest point reached by Mr. Lount is only about twelve miles from the mouth of the river in a direct N. N. W. course, yet, following the windings of the stream, the distance is about thirty-four miles. Besides the great bends which the river makes, its whole course is extremely crooked. At one place, a portage of about sixty chains saves eight miles of river navigation. Mr. Lount's survey terminated at the north side of a sheet of water, two miles wide, called Round Lake, which is the first one met with in ascending the river. In the above distance only four short portages occur, and two of them are past wood-jams.

Character of the country. In the portion examined the Pikitigouching flows through a flat region, with apparently a good soil; but hills of trap could be seen from the river here and there, as far as Round Lake, beyond which the country is said to be everywhere of a level character.

Rocks observed. In the bed of the river, Mr. Lount reports having met at six miles, in a straight line, bearing a little north of east from the mouth of the river, with a dark green dioritic schist, running north-east and south-west; and at nine miles, in a direct north-north-westerly course from the same point, an indurated, pink-colored, calcareous marl in horizontal beds; also a deposit of iron pyrites at the fourth portage, which occurs about two miles below Round Lake.

Survey from Lake Nipigon to the Albany River.

Lake Nipigon to Albany River. In crossing the country from Lake Nipigon to the Albany River, we first followed the Ombabika River to its source, which is in Shoal Lake, three and a-half miles long and one mile wide, lying at a distance of twenty

five miles north-east of the mouth of the river. This lake lies due north and south, and discharges both ways, the stream flowing northward towards the Albany, called the Powitik River, being nearly as large as the southern outlet. No portage occurs on the Ombabika for about nine miles before reaching Shoal Lake, nor for nearly five miles beyond its northern outlet; so that we passed the height of land with the greatest possible ease, having had about seventeen miles of uninterrupted canoe navigation, from the time we made the last portage, in going up on the southern side, till we came to the first in going down on the northern. Shoal Lake has an elevation of scarcely 300 feet over Lake Nipigon, or about 1,200 feet above the sea. Before reaching this (summit-level) lake we passed through twelve others on the Ombabika River, the largest of them, Cross Lake, being four miles in diameter. Although the distance from the mouth of the Ombabika River to Shoal Lake is only twenty-five miles in a straight line, it amounts to forty-two miles by the river. Of this distance, however, upwards of eight miles, in the form of a long acute bend, and four portages may be avoided, by making a portage of sixty-eight chains in length, which would be the fifth from Lake Nipigon.

Lake on water shed.

Height above the sea.

The stream which flows northward from Shoal Lake, at the distance of six miles joins a larger river called the Ka-pi-ko-tongwa, which we descended for twenty-one miles, and then turned up a small branch from the left side called the Mokoké River, from which, crossing the water-shed, we followed the canoe-route north-westward and descended the Zhob-schquay to the Ogoké River, another of the branches of the Albany, and probably the largest from the south side above the Kenogami River. In the ten miles of the Ogoké River which we examined, it averaged about 500 feet in breadth, with large lagoons and marshes on either side, and was from fifty to sixty feet deep in the middle. The Indians informed us that it maintained the same dead-water character as in this section, for a long distance, both above and below; so that it would appear to be well adapted for steamboat navigation in this part of its course; but it is said to spread out to a great width and to become very shallow after it reaches the flat-lying palæozoic rocks further down. We left the Ogoké River by what is called the French Channel, and at less than two miles crossed the height of land which separates its waters from those of another tributary of the Albany lying further north, and which is known in different parts by four distinct names, corresponding with those of the lakes upon its course, the largest of which is called Ka-gé-i-na-gami. We surveyed the lower part of this lake and found it to measure eight miles in length by four in breadth. The upper or south-western part, which is said by the Indians to be equally large, is separated from the lower by a channel, less than half a mile wide. Following this tributary northward, we reached the Albany at a lake called Abazotikitchewan, which, according to our survey, lies at a distance of

Branches of the Albany.

Ogoké River.

Ka-gé-i-na-gami Lake.

eighty-three miles in a straight line, bearing N. 15° E. from the mouth of the Ombabika River. By the canoe-route, which we surveyed, the distance is about 142 miles, in the course of which twenty-nine portages require to be made, or thirty-three by way of the great bend of the Ombabika River.

Aspect of the country.

The country traversed by this route presents a generally level aspect, but the surface is rocky or swampy, as far as we could examine it, with the exception of some small tracts of good land. Some sections are hilly, but the highest points seldom rise more than fifty or sixty feet above the general level. The nearest approach to a completely level tract is in the neighborhood of the height of land, the surface of the country having a greater tendency to become broken in approaching Lake Nipigon on the one side and the Albany River on the other.

Character of the rocks between Lake Nipigon and Shoal Lake.

The rocks consist of common Laurentian gneiss from Lake Nipigon to Cross Lake, the distance being about twenty miles in a straight line Towards Lake Nipigon the general strike is a little north of west, but in approaching Cross Lake it becomes nearly south-west. A ridge of massive red granite makes, its appearance on the south side of this lake, but on other parts of the shore the rocks consist of close-grained, dark green dioritic, and fine-grained, green mica schists, all having a nearly vertical attitude, the strike being from 10° to 20° north of west. Quartz veins, mostly small, irregular and branching, run both with the strike and across it. Leaving Cross Lake, the next rock seen was along the west side of Shoal Lake, and consisted of fine-grained, grey, imperfect gneiss, holding quartz grains and mica in the form of schistose bands in some parts, and as disseminated scales in others ; also branches and veins of quartz, measuring from six inches to two feet in thickness, and containing crystals of epidote and scales of chlorite. The average strike is here from 10° to 20° south of west. The fine-grained green mica schists are again seen on the Powitik River near its junction with the Ka-pi-ko-tongwa, and are here cut by quartz veins a foot thick containing specks of iron pyrites, and also by a vein of coarse granite fifteen feet thick. The strike at this locality varies from S. 72° W. to S. 85° W. The above-mentioned rocks, which appear to have a breadth of twelve or thirteen miles from south to north, are all of the same character as those described, under the same names, in my report of last year, as occurring around the head waters of the Pic River and elsewhere, and are supposed to be of Huronian age.

Huronian rocks.

The next rock met with was at about three miles down the Ka-pi-ko-tongwa, and consisted of a massive, bright grey granite, composed of white quartz, white feldspar and black mica. A coarse massive micaceous gneiss, which runs in a south-westerly direction, and is cut by straggling granite veins, occurs about a mile further down. From this point, gneiss and granite were the only rocks met with all the way to the Albany River. The gneiss is generally of a massive character, and its average strike south-westerly

the most remarkable exceptions being along the Zhob-schquay River befoer it joins the Ogoké, and again where we approached the Albany, in both of which localities it is north-westerly. Around Lake Ka-gé-i-na-gami the only rock observed was a massive bright grey granite, composed principally of quartz and black mica, and traversed by reticulating veins of mixed quartz and feldspar.

The general course of the glacial striæ between Lake Nipigon and the Albany is south-westward, usually approaching more nearly west than south. Glacial striæ.

Survey on Albany River.

Gneiss, striking from west to north-west, is found all around the southern part of Lake Abazotikitchewan, but in going northward, dark crystalline trap, like that of Lake Nipigon, (see my Report of 1869), is met with on the shores in approaching the inlet of the Albany, which is from the north-west. On a small island near the inlet, a dark colored granite and a green hornblende rock are cut by a trap dyke five feet thick, running north-west, and having a basaltic structure, the columns being at right angles to the walls. From the inlet of Lake Abazotikitchewan, the course of the Albany River is south-east for eight miles, when it enters Makokebatan Lake. In this section seven rapids, but no portages, occur, and the width of the river varies from ten or twelve chains at the rapids to more than half a mile in the smooth places between them. Gneiss running N. 70° W. was observed in one place in this section of the river. Crystalline trap.

From the head of Makokebatan Lake to Martin's Falls, a distance of fifty-six miles, the general course of the river is N. 70° E. Makokebatan Lake is nearly straight, and measures sixteen miles in length by one and a-half in breadth. No rock *in situ* was seen upon its shores, which are strewn with small rounded boulders, interrupted in some parts by sand beaches; and the country all around is so low and level, that, looking from one end of the lake, the land cannot be seen at the other. At the eastern extremity of the lake the Albany flows out by two channels, which only come together again at Moosewaké Lake, nearly twenty miles further down. Ten miles below Makokebatan Lake, the northern channel enters the lower part of Washi-sagaigan or the Lake of the Narrows. This part of the lake is four miles long, but the Indians informed me that the upper division approached close to a bay on the north side of Makokebatan Lake, and that a portage leads from one to the other. This would give it a length of twelve miles more, or sixteen in all, which is equal to that of Makokebatan, and the Indians also consider these two lakes to be of the same length. Washi-sagaigan was also formely called Gloucester Lake from a Hudson Bay Company's post of that name, which existed many years ago at the Narrows. Makokebatan Lake to Martin's Falls.

The distance from the Lake of the Narrows to Moosewaké Lake is about five miles. Fine micaceous and dioritic schists (like those already described) running S. 65° W. occur at the east end of the former, and again running S. 30° W. at the west end of the latter; while on the river, between these two localities, is exposed a massive, reddish-grey, micaceous gneiss, much of which is thickly studded with crystals of light red feldspar, giving the rock a coarse porphyritic appearance. From Moosewaké Lake to Martin's Falls (a distance of about twenty miles) the river is full o islands and rapids, and the rocks appear to consist entirely of fine-grained green, micaceous, dioritic and hornblendic schists, with which are associated small veins, strings and patches of quartz, and large veins and masses of coarse granite. Specks of copper pyrites were observed at one place in the dioritic schist. The average strike is west, varying to ten and sometimes to fifteen degrees both to the south and north of that course. The rapids mostly occur where great veins of the granite cross the bed of the river. Towards the end of the above twenty miles, bands of gneiss become interstratified with the schists, and just at Martin's Falls the latter have become entirely replaced by red and grey gneiss, apparently shewing a conformable passage from the Huronian into the Laurentian rocks. What appeared to be a similar blending of these formations was noticed last year in the neighborhood of White Lake.

Blending of Huronian and Laurentian rocks.

At Martin's Falls there is only a rapid with a descent of about twelve or fifteen feet, down which light canoes are easily run. Fifteen portages occur between Makokebatan Lake and Martin's Falls. The greatest single descent is at Ka-gé-ami, where the river descends forty-five feet at one chute. The surface of the country on either side of this section of the river appears to be only slightly undulating, and the soil in many places seems to be good. The general direction of the glacial striæ is about W. S. W., corresponding with that of the upward course of the river. Between Abazotikitchewan Lake and Martin's Falls twelve rivers and large brooks enter the Albany.

Portages.

Glacial striæ.

When at Martin's Falls, Mr. McKay, the gentleman in charge of the Hudson Bay Company's post there, kindly afforded me an opportunity of looking over the journals of the last forty years, which had been kept by his predecessors. From these I ascertained that the river between this point and James's Bay is open, on an average, six months of the year. Hay, turnips and potatoes have been successfully cultivated for a long time at this post, and the cattle kept here thrive well.

Journals kept at Martin's Falls for the last forty years.

Crops.

Below Martin's Falls the river changes its character entirely, becoming more uniform in breadth, depth and velocity of current. In the 120 miles which we surveyed to "The Forks or junction of the Kenogami River, the width is from twenty to thirty chains, the depth in the middle from five to twenty feet (averaging about eleven), and the mean velocity

about three miles an hour. Below The Forks, the river is described as maintaining similar characters all the way to the sea. A rapid occurs near the mouth, but this is said to be easily passed by boats going both up and down. Except in very low water, the river would appear to be navigable by powerful steamers, with shallow draft of water, all the way from its mouth to Martin's Falls, a distance of about 250 miles. As shewing its freedom from obstructions, I may mention that the Hudson Bay Company's boats, in descending, are allowed to drift all night with the stream, in any part of this distance, the submerged top of a fir tree being sufficient to keep them in the channel.

River navigable below Martin's Falls to its mouth.

From Martin's Falls to the junction of the Ogoké River, the Albany makes a curve to the north, equal to a semi-circle measuring over thirty-seven miles. The Ogoké is nearly twenty chains in width where it joins the Albany. From this point the latter runs due east for twenty-one miles, and then turns south-east, and maintains that course for upwards of sixty-one miles, to the Kenogami, which it joins at right angles; the Albany, at this point, turning abruptly to the north-east, while the upward course of the lowest stretch of the Kenogami is south-west.

Junction of the Kenogami River and the Albany.

All the way from Martin's Falls to The Forks, the Albany is flanked by steep banks, either immediately overlooking the water, or rising at a short distance back from it. In descending the river their general height increases gradually from forty to about ninety feet, and they also become more regular and continuous in approaching The Forks. They are at first composed entirely of drab-colored boulder-clay, capped with sand; but, after reaching the palæozoic rocks, these deposits are by degrees replaced, in the lower part of the banks, by drab and chocolate colored marls and shales, the upper part being usually composed of the boulder-clay, overlaid by sand. The bed and shores of the river consist of either smooth, flat-lying rock, or small rounded boulders, packed closely together, and all brought by the drifting ice to a uniform surface, so that they bear a strong resemblance to a well laid pavement.

Character of river-banks.

Packed boulders.

Gneiss, with the usual east and west strike, was the only rock seen *in situ* from Martin's Falls to the most northern point of the great bend; but, immediately on passing this, yellowish limestone strata make their appearance in the bed of the river. Similar limestones, and others of a grey color, are seen in the bed and banks of the river, here and there, to within about twenty miles of The Forks, where they become replaced by the overlying drab and chocolate-colored marls and shales. The inclination of the strata towards the sea is greater than that of the bed of the river, so that the line of division between the chocolate-colored and the underlying drab marls and shales becomes gradually lower and lower in the banks, and at length sinks beneath the river bed. Layers of the two colors are interstratified with each other for a certain thickness at

Limestones.

the junction, so that for some miles the banks have a banded appearance. In this interval a small quantity of soft, thin-bedded, grey sandstone occurs.

Fossils. The few fossils found in these rocks appear to indicate an equivalent of the Niagara formation; but in one place, just below the mouth of the Goose River, or three miles below the point where the river turns south-east, bright red marl occurs on the north bank, and on a small island, a

Coal. mile further down, some loose fragments of a bright bituminous coal were found. The Hudson Bay Company's officers informed me that coal had never been brought into the country; and, considering that the conveyance of even light and valuable goods is so expensive in this region, this is only what might have been expected, so that I cannot suppose this coal to have been brought here by human agency.

The large proportion of boulders of a very dark-colored granular quartzite, and the abundance of rounded fragments of a hard, banded,

Hematite. silicious hematite, containing usually about 50 per cent. of iron, which occur in the drift along the Albany, are worth noting. These erratics have probably come from a long distance to the north-eastward, as indicated by their worn character and the direction of the glacial striæ.

The country on either side of the Albany below Martin's Falls is quite level. The steep banks drain a narrow strip of land on either side of the river, but beyond this great swamps appear to extend on all sides. Water is constantly oozing from the foot of the banks, rendering it very difficult to walk along the sides of the river, on account of the deep mud, except upon the boulder pavements already described. The Albany receives nineteen rivers and large brooks between Martin's Falls and The Forks.

Kenogami River.

The Kenogami River, and the Albany below The Forks, flow in the same great valley, which appears to be a more considerable depression of the country than that occupied by the portion of the Albany already described.

Marine shells. On coming to The Forks we found, for the first time, marine shells in the drab or bluish-gray pebbly clay in the bank of the river. The species, in order of abundance, are *Saxicava rugosa*, *Mya truncata*, *Tellina proxima*, *Cardium Grœnlandicum*, *Leda truncata and Mytilus edulis*. A short distance up the Kenogami River we found, in addition to these, *Tellina Grœnlandica* and *Buccinum undatum*, making eight species in all. Along the east bank at the junction of the two rivers, the drab or bluish-gray, gravelly clay, which holds the marine shells, is about thirty feet thick, and is overlaid by about thirty feet more of clay, sand and gravel,

Lignite. holding fresh water shells, and having a band of impure black lignite, two feet thick, at about six feet from the top.

Mamattawa. From The Forks to Mamattawa, a distance of fifty miles in a straight line, or sixty by the river, the upward course of the Kenogami is a little

east of south. At its mouth this river is thirty chains in width, but it soon contracts to about twenty, which it maintains all the way to Mamattawa. Throughout this distance, it is shallow with a slack current, except in a few places; while the banks are generally low and the country level on either side. The marine shells are found in abundance in the clay and sand of the banks all the way to Mamattawa, and for a few miles above it, when they disappear entirely. Mamattawa is a contraction of an Indian word signifying the coming together of many branches, and refers to the fact that two large tributaries here join the main stream from the east, and both of these again receive branches near their mouths. The Hudson Bay Company had a post at this locality many years ago, but it is now re-established, under the name of Newpost, further down the river, at a distance of thirty miles from The Forks. From Mamattawa, the river has a nearly straight upward course, bearing S. 50° W. to the junction of the Bagutchewan River, the distance being twenty miles in a straight line, or only three more by the stream. The general upward course of the Kenogami, from the mouth of the Bagatchewan River to Pembina Island is S. 60° W., and the distance is about twelve miles in a straight line, or sixteen by the river.

Bagutchewan River.

Pembina Island.

On the east side of the Kenogami River, where it joins the Albany, the chocolate-colored marl and shale hold a band, about four feet thick, of a coarse oolitic character, the spheroidal concretions being about the size of salmon roe, and composed of clear calc-spar, while the interstices are filled with soft, porous, calcareous marl, or sometimes with limestone. This rock was met with at other points on the river as far as Mamattawa and in one place about six miles above it.

Kenogami River.

In ascending the Kenogami River, we have a repetition of the geological conditions which were observed on the Albany. From The Forks to Mamattawa, drab and chocolate-colored marls and interstratified bands of earthy yellowish limestone are exposed in a few places. Following up the stream, at about seven miles above Mamattawa, the bottom of the river is composed of beds of limestone which are in places somewhat disturbed. The river between this spot and the Albany appears to run upon the axis of a slight anticlinal. At the end of the seven miles indicated, we enter between banks composed of chocolate-colored marl interstratified with bluish-green bands, and varying from fifty to eighty feet in height. These banks continue on both sides almost uninterruptedly for about ten miles up the stream. Above this, the banks, which maintain almost the same height, especially on the southern side, are mostly composed of stiff gravelly clay with boulders, but the chocolate-colored marl is seen here and there almost to Pembina Island, beyond which the geology of the country, all the way to Lake Superior, was described in the report which I had the honor to submit to you last year.

Limestones and marls.

Return journey. From Pembina Island we pushed on as rapidly as possible, by way of Long Lake and the Pic River to Lake Superior, which, with our small party, we had great difficulty in reaching, owing not only to the lowness of the water and the great number of portages which we were obliged to make, but also to the snow and ice, and the unusual severity of the season, even for that region. The party, however, suffered no inconvenience from

Provisions. any want of provisions, as we succeeded in taking with us, all the way from the mouth of the Nipigon River, at the same time that we carried on the survey, an abundant supply for the four mouths during which we were gone, not only for the use of our regular party, while travelling over the 800 miles on the round trip back to Lake Superior, but also for the additional men whom we required in making the other surveys from Lake Nipigon, and for our Indian pilots on the Albany River. Besides frequent presents of small quantities to the Indians whom we happened to meet, we were obliged to leave a considerable proportion of our surplus provisions at Newpost and at the mouth of the Bagutchewan River.

I have the honor to be,

Sir,

Your most obedient servant,

ROBERT BELL.

REPORT

ON

EXPLORATION OF COUNTRY

BETWEEN

LAKE ST. JOHN AND LAKE MISTASSINI,

BY

MR. WALTER McOUAT,

ADDRESSED TO

ALFRED R. C. SELWYN, ESQ., F.G.S.,

DIRECTOR OF THE GEOLOGICAL SURVEY OF CANADA.

SIR,—In compliance with instructions received from you in May last, I was engaged during the past season, in company with Mr. John Leitch, in making a geological exploration in the country to the north and north-west of Lake St. John, on the Saguenay, and extending to, and embracing a portion of Lake Mistassini ; and I now beg to submit to you a statement of the work accomplished.

Leaving Montreal on the 10th June, I arrived on the 17th at Lake St. John, where I joined Mr. Leitch, who had preceded me by about a week. Our departure from this lake, where we had arranged to procure men and canoes, was seriously delayed by the unusual lateness of the spring in that region. Owing to this cause the Indians, with few exceptions, did not return from their spring hunt till nearly a month after the time of our arrival, so that we were unable to procure the necessary men. From the same cause, it was near the middle of July before the spring flood had subsided sufficiently to allow of the ascent of the rapid rivers flowing into the lake from the north. For these reasons, we did not leave Lake St. John till the 13th of July.

Selection of route.

A short reference to the work done in the same part of the country, during the previous season, will explain the considerations by which we were guided in deciding upon the route to be selected for our line of traverse from Lake St. John to Lake Mistassini. Mr. Richardson, by ascending the Ashuapmouchouan River, reached a point bearing N. 58° W. fromthe mouth of that river, and distant from it a hundred and twenty miles, where the Laurentian is overlaid by newer rocks. Within about six miles of this point, the line crosses the height of land between the St.

Lawrence waters and those flowing to Hudson's Bay. Continuing from this point, the direction of Mr. Richardson's exploratory line is N. 34° E. or nearly at right angles to the foregoing, to the southern extremity of Lake Mistassini, a distance, in a straight line, of fifty-five miles. This line, with the exception of the last mile or two, lies entirely on the outcrop of a series of rocks which are in some parts characterised by rich deposits of copper ore. According to Mr. Richardson, the general strike of these rocks is about N. 41° E. and S. 41° W., or a few degrees further from north and south than the line on which he crossed them. Near Lake Mistassini, they give place to rocks of a different character,—the flat limestones mentioned in his Report. As required by my instructions, we endeavoured to reach Lake Mistassini by some route that would enable us to cross the run of these copper-bearing rocks at some considerable distance from where they were seen by Mr. Richardson, and thus obtain some idea of their distribution. After careful inquiry, we concluded that the only practicable route by which this object could be attained, considering the shortness of the season, would be by way of the Mistassini River.

Ascent of the Mistassini River.

Leaving Lake St. John, as already stated, on the 13th of July, we ascended the Mistassini for a hundred and five miles, to a point bearing N. 13° W. from its mouth, and distant, in a straight line, eighty miles. At this point we left it on the west side; and here also we commenced our survey, the Mistassini River having been previously surveyed by Mr. Blaiklock, P.L.S. The distance from this point to Lake Mistassini, in a straight line, is sixty-one miles, in a bearing N. 50° W., although the distance actually measured was about ninety miles. We struck the lake at the end of a long narrow arm, called Cabistachuan Bay, and about nine miles to the north-eastward of the southern extremity of Abatagush Bay,

Measurements.

where Mr. Richardson's line comes upon it. Continuing our measurements on the lake, our survey was connected with that of the previous season at the Hudson Bay Company's post, where we arrived on the 14th of August, thirty-three days from the time of our departure from Lake St. John. Having despatched a canoe to Blue Point, for the remainder of our provisions, we set out from the post to make a survey of such portions of the lake as the time at our disposal would permit; and on the 14th of the following month we returned to the same place, the season being then so far advanced that it was necessary to return, without any avoidable delay, to the Canadian side of the height of land. We were obliged, however, to remain at the post till the 20th, on account of the failure of our provision canoe to arrive at the time expected. On that date we left on our homeward journey, reaching Lake St. John on the 7th, and Montreal on the 22nd of October.

The first portion of our survey—that from the Mistassini River to the lake of the same name—may be conveniently divided into three

parts. The first extends to the Chief River, mentioned in Mr. Richardson's report as the main branch of the Ashuapmouchouan, the distance, in a straight line, being twentyeight miles, in a bearing N. 80° W. Rather more than half way the line on this part crosses the Wassiemska, which appears to be nearly as large as the Mistassini, into which it flows. The second part is from the last mentioned point to the height of land between the St. Lawrence and Hudson's Bay waters, the distance being thirty five miles, and the bearing N. 25° W. The Chief River, about a mile above where our line strikes it, divides into two branches, which are nearly equal in size. The most westerly of these we surveyed for about twenty miles above the fork. The general course is nearly north and south. This is also the course of nearly all the small streams, tributary to the Ashuapmouchouan, between this and the height of land, many of which are crossed obliquely by the line just defined. Both this line and the preceding, pass entirely over a Laurentian country. The rocks are mostly grey, moderately fine-grained, micaceous gneiss,with considerable dark green, hornblendic gneiss interstratified, usually in layers from one inch to a foot thick. Red gneiss is rarely, if ever, seen. The dip is very uniformly east, or a little south of east, and the angle of inclination is always high, the strata being often nearly vertical. There is a very noticeable connection between this fact—the uniformly north and south strike of the strata—and the peculiar conformation of the surface. Over the whole region from the Mistassini River to the height of land, and two or three miles beyond it, as far as it could be seen from our line of traverse, the surface is broken by low, narrow ridges, running nearly north and south, or a little east of north and west of south. These ridges are seldom more than three hundred, and often not more than one hundred, feet above the general level. The direction of the rivers generally conforms with this arrangement, and the small streams found in all the valleys frequently expand into lakes from a quarter to half a mile wide, and perhaps several miles long. These are so numerous that from the top of Frog Mountain, a hill rising to a height of about 350 feet, and situated about the middle of the second of the two lines referred to, I counted upwards of forty of them within a radius of six or eight miles.

Mistassini River to Chief River.

Chief River to height of land.

Gneiss.

Character of the surface.

The remaining distance, from the height of land to Lake Mistassini, is the last of the three parts into which the whole exploratory line is divided. The distance, in a straight line, is only five and a-half miles, and the bearing N. 60° W. The ridge forming the water-shed is about ten chains wide, and, where we crossed it, has a small lake on each side, that on the south-east side discharging by a stream which is tributary to the Ashuapmouchouan, and the other sending a contribution to Rupert's River, through Lake Mistassini. These two small lakes are nearly on the same level, and only sixty feet lower than the highest part of the dividing ridge. We

From the height of land to Lake Mistassini.

descended to within a mile of Lake Mistassini by a small rapid river called Little Perch River. About three miles from the lake, this stream falls about sixty feet over an escarpment facing to the north-west, and overlooking a comparatively level tract of country, extending in that direction as far as the eye can reach. The rock in this escarpment is grey gneiss, similar to that already described, and dipping about S. 65° E. < 50°. About a mile to the westward, and within about two miles of the lake, hard bluish-grey

Limestones.

limestones are met with. These are the flat limestones of Lake Mistassini, mentioned in Mr. Richardson's Report as the northernmost of the three successive groups of rocks crossed by his exploratory line.

About mid-way between the last exposure of gneiss and the first of limestone, a distance, as already stated, of about a mile, there are some small exposures of a reddish feldspathic rock, apparently of a brecciated character, with calcareous seams, and shewing a considerable amount of a dull green steatitic mineral. This rock occupies as nearly as possible the position in which one might expect to meet with Mr. Richardson's second group, which includes the copper-bearing strata, and may represent some of the conglomerates of that group ; but, if it does not, no rocks of that series were observed. Nothing was seen at all like the chloritic slates of Lakes Chibogomou and Wakinitchee, which, on the former lake, Mr. Richardson found to contain important deposits of copper ore.

Surveys on Lake Mistassini.

The Surveys on Lake Mistassini constitute the second of the two divisions into which our season's work naturally divides itself. We measured on this lake a coast line of about a hundred and fifty miles, including no bays less than a mile in width. The main body of the lake was found to be of a very elongated form, lying in a south-west and north-east direction, with a perceptible curve between the south-west extremity and the farthest point seen by us, the concavity of the curve being towards the south-east. A long, ragged tongue of land, upwards of twenty miles in length, running from the south-west end, divides that end of the lake into two parts ; and, of these, the one on the south-east side divides into several long narrow arms, which are out of the general direction, having a nearly north and south trend. A series of long narrow islands, which were seen only from a distance, extends for many miles in the same direction, beyond the above-mentioned point, being, like it, apparently parallel with the longer

Measurements.

axis of the lake. We carried our measurements round the long point, to the bottom of the bay on the north-west side of it, called Poonichuan Bay, and thence along the main north-west shore of the lake, for about seventy-miles from the extreme south-west point As no land was visible from this position, looking in a north-easterly direction from a point about forty feet above the level of the water, the whole length of the lake cannot be much, if any, less than a hundred miles. It appears, however, to be comparatively narrow, being probably not more than fifteen miles wide, unless the width increases beyond where we saw it.

All the rocks met with on the lake are the flat limestones already mentioned. They seldom dip at a higher angle than twenty degrees, and although very much disturbed by minute undulations, the general strike appears to be with the direction of the lake. These strata appear to occur over the whole area occupied by the lake, but they are bounded all along the north-west shore by Laurentian gneiss. They would appear not to extend far beyond the lake in a south-westerly direction, as it seems probable that they are there cut off by the meeting of the Laurentian gneiss with the rocks of Mr. Richardson's second group.

Flat limestone strata.

The character of the land being much the same as that described by Mr. Richardson, I have nothing to say on that head which appears worthy to be introduced into this preliminary Report, although I made numerous notes both on this and other subjects, which will find an appropriate place in a more detailed Report after further exploration.

Character of the land.

The whole of the season's work has been protracted on a scale of forty chains to an inch, and also reduced from that scale to one of four miles to the inch; and will be available for the construction of a general map of the region. It may be added that all the bearings given in this Report have been corrected for variation, and, therefore, refer to the astronomic meridian.

I have the honour to be,

Sir,

Your most obedient servant,

WALTER McOUAT.

MONTREAL, May 9th, 1872.

PROGRESS REPORT

OF

EXPLORATION AND SURVEYS

IN THE

COUNTIES OF LEEDS, FRONTENAC AND LANARK,

With Notes on the Gold of Marmora.

BY

MR. HENRY G. VENNOR, F.G.S.,

ADDRESSED TO

ALFRED R. C. SELWYN, ESQ., F.G.S.,

DIRECTOR OF THE GEOLOGICAL SURVEY OF CANADA.

SIR,—The following Report is a summary of the result of my geological researches in the Province of Ontario during the season of 1871.

Frontenac Leeds and Lanark.

As you directed, my investigations were continued through those parts of the counties of Frontenac, Leeds and Lanark which had not previously been explored. The rocks met with do not differ in their general characters from those described in the *Abstract of Report* on the geology of these counties which I had the honor to lay before you last spring, and in which they were divided into three groups, represented by the letters A, B, C, or the figures 1, 2, 3, corresponding with the divisions previously adopted for the rocks of the county of Hastings, described in my Report on that county. [Report of Progress, 1866–69.]

Crystalline limestones.

In commencing the investigation last summer I made the crystalline limestones of division A a special study, and consequently chose that portion of the country where these were most largely represented, namely, the townships of Bedford, Loughboro', Olden and Oso, in the county of Frontenac; North and South Crosby, in the county of Leeds; and North Burgess, Bathurst and South Sherbrooke, in Lanark; and which is furthermore rendered important by the occurrence of deposits of magnetic iron ore, and of apatite, or phosphate of lime. During the course of my exploration all these deposits were examined and their respective stratigraphical positions determined as far as possible.

Magnetite and apatite.

MAP OF THE
TOWNSHIP OF MARMORA
shewing the position of the
MINES
NOW BEING WORKED FOR GOLD.
To accompany the Report of M.r H.G.Vennor for
1871

N.
W.
E.
Mag. N.

Deer River

Wills

Creek

Bedwell

Baily's P.O.

CROW LAKE

VILLAGE OF MARMORA

Crow River

From Stirling

Moira River

N. 10 W. Mag.

32 31 30 29 28 27 26 25 24 23 22 21 20 19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

I II III IV V VI VII VIII IX X XI

Explanation

Granite

Gold Horizon

Bedded Lodes

The angles (<) denote dips of the lodes to the westward

Index

1. *Cook or William's Mine.*
2. *Gillen Mine.*
3. *Severn Mine.*
4. *Gatling's Mine.*
5. *Hawkeye Co.e Mine.*
6. *Neill's Mine.*
7. *Powell's Mine.*

Scale. 1 Mile to an Inch.

The mapping of the crystalline limestones occupied a much greater part of the season than I had anticipated, for, owing to the incorrectness of the surveys through this section of country, we were obliged to keep up a continuous line of measurements throughout the whole area examined, and, for the same reason, found it necessary to re-survey all the roads through the townships of Bedford, Olden and Oso. The instrument used was the prismatic compass, with measurements by pacing, and occasional chaining. Measurements.

Later in the season I again visited the townships of Madoc and Marmora, in the county of Hastings, and spent some time in a further examination of certain auriferous zones, the existence of which was first pointed out during the years 1866 and 1867, and on which are now situated several promising mines with stamp-mills. From the managers of these mines much assistance was received, and I would particularly acknowledge the kindness of Mr. W. J. Gatling, J. D. R. Williams, M.D., Mr. J. H. Dunstan, Mr. O'Neill and Mr. Jenkins. From Mr. Dunstan I have, further, received plans, drawn to scale, of a rotating cylinder-furnace, recently patented by him in the United States; and from Mr. Gatling a sketch-map, shewing the position of the shafts on his own and adjoining locations. The results of the foregoing explorations may be given under the following heads: Madoc and Marmora. Acknowledgement of assistance.

I. Notes on the Iron Ores occurring in the Counties of Frontenac, Leeds and Lanark, with assays.

II. Summary of the Phosphate of Lime or Apatite Deposits now being worked in North Burgess, Bedford and South Crosby.

III. The Geological Position of certain Ore-zones in the Township of Marmora, now being worked for Gold, with assays.

I. *Iron Ores.*—The iron locations examined were the Chaffey and Yankee or Mathews mines, in South Crosby; the Howse mine in Bedford; the Bygrove, Fournier and Christie's Lake mines in South Sherbrooke; the Foley mine in Bathurst; and the Dalhousie mine in Dalhousie township; all of which have already been alluded to in my *Abstract of Report* for the year 1870. Of these, the only ones worked to any extent during the year 1871, were the Chaffey, Yankee, and Dalhousie mines. Iron Ores.

The *Chaffey Iron Mine*, is situated on an island in Mud Lake on the Rideau, in South Crosby, and is about one mile distant from the village of Newboro'. Two excavations have been made, about thirty feet in depth, on a solid bed of magnetic iron ore, which strikes in a N. N. E. direction. During 1871, some twelve men were employed, and 3,500 tons of ore raised and sold. The ore is shipped to Cleveland, Ohio, via Kingston. At the mine it is worth $2.25 per ton, and delivered at Cleveland it brings from $6.00 to $6.50 per ton. The cost of carriage to Kingston—a distance of forty-four miles—is seventy-five cents per ton Chaffey Mine.

Yankee or Mathews Mines.

The *Yankee*, or *Mathews Mine*, is situated about one hundred rods N. N. E. from the Chaffey mine, and on a continuation of the same bed. It is owned by S. H. Mathews Esq., and has been more or less worked since the year 1860. On this bed an excavation of irregular form has been made to the depth of about forty feet. During the year 1871, fifteen men were steadily employed, and upwards of 4,000 tons of ore mined and raised, 3,300 tons of which were sold, and shipped to Cleveland, Ohio, via Kingston. The price per ton at the mine, and delivered at Cleveland, is the same as that of the Chaffey mine. The total amount of ore sold and shipped to Cleveland from these two mines, for the years 1870 and 1871 combined, amounted to about 14,520 tons.

The demand for this quality of ore (*see analyses*) varies considerably at different periods, and, I understand, was much greater during the year 1869, than during 1870 and 1871.

Dalhousie Mine.

The *Dalhousie Iron Mine* is situated on the east half of the first lot, in the fourth concession of the township of Dalhousie, and is about twelve miles distant from the town of Perth. From the time of its being opened, in 1866, until September, 1871, this location was worked by Alex. Cowan, Esq., of Brockville, and partners; but subsequently they sub-leased it to Messrs. Hannah and Spearman, of Cleveland, Ohio, who at present work it. The mine is on a bed of red hematite averaging seven feet in thickness, striking N. E. by E., dipping south-eastward $< 45°$, and contained in a band of crystalline limestone. Six shafts have been sunk on the dip, as follows :—

Shafts.

No	1	shaft, 8 by 10 feet and timbered.....	68	feet	deep
"	2	"	49	"	"
"	3	"	25	"	"
"	4	"	20	"	"
"	5	"	45	"	"
"	6	"	29	"	"

Quantity, transportation and value of ore.

Mr. Jerald C. Brown, who has for some years managed the workings at this mine, informs me that the total length of *stopes* amounts to 408 feet; and that the quantity *stoped* from the opening of the mine, up to November, 1871, was 80,800 cubic feet. From this opening there has been extracted very close upon 10,000 tons of ore. About twenty-five men are employed, including one mining-captain and one blacksmith. The ore is drawn to Perth by waggons in summer, at the rate of $1.70 per ton, and in winter by sleighs, at $1.00 per ton of 2,240 lbs. From Perth it is carried by railroad to Brockville, and shipped thence to Cleveland, Ohio. The cost of the ore, laid down in Cleveland, is $5.00 per ton. The quantity raised from April 1st, 1871, to November 6th, 1871, was about 2,500 tons of 2,240 lbs.

Analysis of ore from the Dalhousie Mines.

Mr. Alexander Cowan informed me that it contained an average of 60 per cent of iron, according to numerous analyses made in the United

States. An analysis of it made in the Geological Survey laboratory by Mr. Gordon Broome gave as follows :—

Peroxyd of iron	82.250 = metallic iron 57.6
Insoluble residue	16.050
Lime	trace
Phosphorus	.026
Water	.660
	98.986

Five further determinations recently made, have afforded an average of 56¾ per cent. of iron, showing a close agreement with the result obtained by Mr. Broome.

Partial analyses by Dr. Harrington.

Samples of ore from the Chaffey, Yankee, Bygrove, Fournier and Foley, mines were, in accordance with your instructions, submitted to Dr. B. J. Harrington for analysis. The following figures shew his determination of the percentage of metallic iron in these ores, but more time will be required for their complete examination :—

Chaffey Mine	52.91	per cent.	metallic	iron.
Yankee Mine	52.09	"	"	"
Bygrove Mine	59.55	"	"	"
Fournier Mine	59.59	"	"	"
Foley Mine	58.69	"	"	"

The ores from the Chaffey, Yankee and Foley mines were all found to be titaniferous. That of the Chaffey mine is stated by Dr. Hunt to contain 9.80 per cent. of titanic acid (Report of Progress for 1866-69, page 257.)

Dr. Harrington finds 12.32 per cent. of titanic acid in the ore from the Yankee mine, and also a large amount of sulphur, which renders it altogether an inferior ore.

The ore from the Foley mine contains only 2.68 per cent. of titanic acid, which is not a sufficient amount to detract from its value.

The Chaffey and Yankee ores were also examined for phosphorus, but neither of them was found to contain a weighable amount.

The Bygrove and Fournier ores are free from titanium, and I think it extremely probable that they will be found to belong to beds somewhat higher in the series than the titaniferous ores.

Phosphate of lime.

II. *Phosphate of Lime*.—Last year I was enabled to determine the true position of the deposits of phosphate of lime, or apatite, in the townships of North Burgess, South Crosby and Bedford, and to establish the fact that, with very few exceptions, all of the workable deposits of this mineral occur in a certain belt or zone of pyroxenic and gneissic strata, and in the form of lenticular bedded masses, and irregular veins. This belt or zone, which was found to have a thickness of from 2,600 to 3,900 feet, lies in a long irregular trough, the axis of which may be described as running from the north-east to the south-west corner of North Burgess, thence south-westward through South Crosby, into the

Irregular trough.

south-east corner of Bedford township—between Devil and Opinicon Lakes—and still further in this direction, through the townships of Storrington and Loughboro.' All along this line, bed-deposits of phosphate of lime are of frequent occurrence. The width of the trough or basin seldom exceeds six or six and a-half miles, and is often narrowed to less than one-fourth the distance. In it the detailed sequence of the rocks has yet to be made out, but the available deposits of phosphate would appear to occur towards its outer rim, and within the 3,900 feet of pyroxenic and gneissic strata already alluded to.

Phosphate Locations.

The following list of *Phosphate Locations* comprises the most important of those examined by me last season, and in all of which work to a greater or less extent was being carried on :—

				WORKED OR OWNED BY
No.	1.	North Burgess—	Concession VIII, Lot	1.—Ed. Schultze.
"	2.	"	" " "	2.—R. Matheson.
"	3.	"	" " "	3.—Ritchie & Jackson.
"	4.	"	" " "	4.—Watts Brothers.
"	5.	"	" " "	5.—R. Matheson.
"	6.	"	" VII, "	10.—Ed. Schultze.
"	7.	"	" " "	11 & 12.—A. Cowan.
"	8.	"	" VI, "	10.—E. Clark.
"	9.	"	" " "	13 (W.½).—Ed. Schultze.
"	10.	"	" " "	13 (E.½).—J. F. Baker.
"	11.	"	" " "	14, 15 & 16.—Morris & Griffin.
"	12.	"	" " "	18 & 19.—Matheson & Bell.
"	13.	"	" " "	21.—E. Clark.
"	14.	"	" V, "	16.—R. Leckie & Co.
"	15.	"	" " "	18 & 19.—Matheson & Bell.
"	16.	"	" IV, "	11.—E. Clark.
"	17.	"	" III, "	15 & 16.—Moro Philips.
"	18.	South Crosby,	" VI, "	12.—Ed. Schultze.
"	19.	Bedford,	" XVII, "	1.—A. Cowan.

Schultze's Locations in Burgess.

Schultze's Locations.—The apatite on these locations, Nos. 1, 6, 9, in North Burgess, was being worked by Mr. Edward Schultze for export to Germany. The most promising location is that on the first lot of the concession, where bedded deposits of a beautiful green crystalline apatite, entirely free from calcite, strike almost east and west with a slight underlie to the northward. On the tenth lot of the seventh concession Mr. Schultze owns one hundred and fifty acres. Here, a bed of apatite was uncovered for a distance of about four hundred feet, having an average width of from two to three feet. In this bed, there is an abundance of tolerably transparent mica, in large crystals, which may yet be of economic value. The apatite is of the red variety, and both it and the mica are further colored red by the decomposition of a bluish-grey hematite, which is more or less mixed with the former. From the fact that the mica constitutes the larger portion of this vein, and owing to its low position, and consequent difficulty of drainage, I hardly think it can be worked with profit. On the road

allowance between lots thirteen, of the sixth and seventh concessions, a shaft has been sunk to a depth of thirty feet on an irregular vein of red apatite, from which about forty tons of the mineral have been raised, averaging as high as 90 per cent. of phosphate of lime. A number of small openings have also been made by Mr. Schultze on the thirteenth lot in the sixth range, and a considerable quantity of apatite raised, of the quality known as "seconds." It occurred in layers or beds of from eight to twelve inches in thickness, and contained a large amount of black mica. Several bands of a pink calcite, highly charged with crystals of apatite, also occur on this lot. These crystals are very easily removed from the matrix, and although at present this form of deposit is looked upon by the miners as useless, there is little doubt that, at some future period, a simple process will be devised by means of which it will be treated with profit. Altogether Mr. Schultze has mined, raised and bought, in North Burgess, upwards of nine hundred and seventy-six tons(of 2,240 lbs.) of apatite, of which he has shipped six hundred to Germany.

Mica and pink calcite.

Matheson's Locations, Nos. 2 and 5 of the foregoing list, namely, lots two and five, in the eighth range of North Burgess, have been owned by Roderick Matheson, Esq., of Perth, for many years; but no work was done until the fall of the year 1870, from which period operations have been carried on, to a greater or less extent, up to the present. The rocks on the first of these lots are chiefly pyroxenic, with quartzose garnetiferous gneiss, and have a pretty uniform east and west strike, with uncertain dip. The apatite occurs in three bedded deposits, one of which has a breadth of nearly six feet. This has been opened upon for a distance of sixty feet on the strike, and to about fifteen feet in depth, and from it a large quantity of a beautiful green apatite has been raised and sold to Mr. Schultze for shipment to Germany. The deposits on the fifth lot are more irregular, and are much mixed with calcareous matter.

Matheson's Locations.

Ritchie & Jackson Location, No.3, lot three,in the eighth range of North Burgess, is at present being worked for Messrs. Ritchie and Jackson, of Belfast, Ireland, by Mr. W. Hargreaves of Perth. Here, the strata are very quartzose reddish gneiss and pyroxene rock, striking almost east and west, and dipping to the northward $< 45°$. A considerable amount of work has been done on two bedded deposits of apatite, eight to nine feet broad, which, with the enclosing strata, strike almost east and west, with underlie to the northward. This location has already been alluded to by Mr. Broome, as *McKinley's lot*, in his notes on the Phosphates of this section of country, (Report of Progress, 1870-1871, page 320.) It was very actively mined during the season of 1871, but I have been unable to obtain any return of the exact amount of mineral raised.

Ritchie and Jackson Location.

Watt Location, No. 4, lot four, in the eighth concession, was leased for twelve months, by two brothers named Watt, from Mr. Flaherty, for the

Watt Location.

sum of eighty dollars. Work was commenced in the autumn of 1870, and was continued during the ensuing winter, and during the summer of 1871. With very little outside help, these two young men succeeded in mining and raising upwards of two hundred and twenty-five tons of a very pure apatite, which they sold to Mr. Schultze for export to Germany, at the rate of $10.50 per ton, at the mine. The vein or bed from which this amount was raised is conformable with the adjacent strata, and runs in an almost east and west direction. Owing to the expiration of the lease, which ran out on the 24th September, 1871, and was not permitted to be renewed, the work was suspended. The vein, however, still holds forth good prospects.

Alex. Cowan's Locations in Burgess.

Alex. Cowan's Location, No. 7.—The lots worked by Alex. Cowan, Esq., and partners (*Brockville Chemical and Superphosphate Company*) are the eleventh and twelfth in the seventh concession, on the latter of which is situated the *Victoria Phosphate Mine*. This mine is nine miles distant from Perth, and about seven from the Rideau Canal. It is on a bed or vein, apparently conformable to the immediately surrounding pyroxenic and gneissic strata, striking in a N. N. E. direction, and having an average width of about three feet. This has been worked pretty steadily since the month of April, 1870. Two shafts have been sunk, one to the depth of about fifty-six feet, and another to about forty-eight feet, besides numerous other minor openings of varied extent. The total area worked over is about three hundred acres. From the main deposit there has been

Quantity raised.

raised from April, 1870, up to April, 1871, upwards of eight hundred tons of apatite, averaging about 85 per cent. Work was also actively carried on here during the summer of 1871, and a large additional amount raised, the exact return of which I have not yet received. The produce of this mine is shipped to the Brockville Superphosphate Works, near the town of Brockville, whence it is exported, as superphosphate, both to the United States and Europe.

J. F. Baker's Location.

J. F. Baker's Location, No. 10, (*Cambria Phosphate Mine*).—This location is on the east half of the thirteenth lot in the sixth range of North Burgess. It is worked by Mr. J. F. Baker, for an English company, which commenced operations during the month of September, 1871. A number of bedded deposits occur here, varying in width from a few inches to seven feet. Seven of these have been opened, and, although the lowest point reached last fall was only fifteen feet, Mr. Baker had succeeded in raising about two hundred tons of first quality phosphate, — the result of about three months' working. The mineral here varies in character from green, coarsely crystalline and massive, to white, finely granular and saccharoidal. This would appear to be a very promising locality. It is only one mile from the Rideau, to which the apatite can be drawn by winter road, for fifty cents a ton. The general character of these deposits has yet to be investigated.

E. Clark's Locations, Nos. 8, 13 and 16.—The eleventh lot of the fourth, and the tenth and twenty-first lots of the sixth concession in North Burgess are three lots out of a number purchased by Mr. E. Clark, of Sherbrooke, from the Bank of Upper Canada. On these Mr. Clark, during the summer of 1871, commenced and personally superintended a series of experimental workings, and was fortunate enough to discover a number of most valuable deposits of apatite, especially on lots ten and twenty in the sixth concession. Those on the tenth lot were clearly seen to occur as parallel bedded deposits, alternating with bands of reddish gneiss and pyroxene strata. Towards the rear part of the lot the general strike is N.N.E., and here some of the apatite beds are a good deal mixed with a fine bluish-grey hematite, in much the same manner as the deposit already noted on Mr. Schultze's property, on the tenth lot in the seventh concession. Towards the front of this lot, and approaching Long Lake, the strike of the rocks changes to almost east and west, and here further deposits of apatite were observed, also bearing in an east and west direction. Although the work on this lot was, as I have before stated, merely of an exploratory or experimental character, a very considerable amount of "first quality" red and green apatite was extracted, and piled on the ground for future disposal. There appear to me to be four distinct main parallel beds, besides a multitude of minor ones, some of the more important being of at least five feet in thickness. The work on the twenty-first lot, in the same concession, was also personally superintended by Mr. Clark, but was not commenced until late in the season, and after stormy and cold weather had set in. Here, however, a few days' work uncovered some very promising deposits, from some of which large masses of nearly pure apatite were extracted. At the time of my visit to this lot sufficient work had not been done to permit of my properly understanding the true nature of the deposits, but, from the openings which had been made, they appeared to me to consist of large bedded masses, striking and dipping with the enclosing rocks. Mr. Clark is at present, I understand, in treaty with an English company, which proposed purchasing these lots, with a view to their further development.

E. Clark's Locations.

Apatite associated with hematite.

Four distinct beds.

Matheson and Bell's Locations, Nos. 12 and 15.—The lots on which Messrs. Matheson and Bell were at work during the year 1870 have been mentioned in the notes by Mr. Gordon Broome, already cited. During 1871, other deposits of apatite were opened up by them on the eighteenth and nineteeth lots, in the sixth, and on similarly numbered lots in the fifth concession of North Burgess. On the first-mentioned lot, a great number of openings have been made on a series of parallel and bedded deposits of this mineral, which strike, with the enclosing strata, in an almost east and west direction, along the point of land which here juts out into Black or Salmon Lake. Much of the apatite is very largely mixed with a pink or

Matheson and Bell's Locations.

Pink calcite with greyish pyroxene.

reddish calcite, which holds aggregations of large-sized crystals of a greyish pyroxene. A considerable quantity both of "firsts" and "seconds," has been raised on these lots, but I am not aware that any was shipped during last summer. Much of the work done has been, up to the present time, of an experimental character, but there can be little doubt that a large amount of marketable phosphate will yet be found here.

Morris and Griffin's Locations.

Morris and Griffin's Location, No. 11.—During the year 1870, Messrs. Morris and Griffin, of Wolverhampton, England, manufacturers of artificial manures, purchased seven hundred and fifty acres of land in North Burgess; namely, the fourteenth, fifteenth and sixteenth lots in the sixth and seventh concessions. Early in the season of 1871, Mr. Wm. Davis, agent for these gentlemen, commenced a series of explorations on these lots, and succeeded in discovering on those in the sixth concession some important indications of phosphate of lime. These occurred towards the rear ends of lots fourteen and fifteen, and close to the line between concessions six and seven. The openings made during the season were chiefly shallow surface pits, many of which, however, gave considerable encouragement for the further prosecution of the work. The lots in the seventh concession have not, and are not likely to yield anything of importance, as they are chiefly occupied by the horizontal sandstones of the Potsdam formation. Messrs. Morris and Griffin, I am informed, will commence systematic work on the most promising portions of their lots during the approaching summer.

Potsdam sandstones.

Locations 14 and 17.

The remaining locations in North Burgess noted in the foregoing list, namely those of R. Leckie and Company, of Montreal (No. 14), and Mr. Philips of Philadelphia (No. 17), were not worked during the past summer, although both of them still hold out good encouragement for further development. From No. 14 upwards of sixty tons of phosphate have been extracted, and still remain on the ground at the mine. From No. 17 about one hundred tons have been shipped by Mr. Philips to the United States, via the Rideau Canal. No. 14 location, R. Leckie and Company, is, I believe, now in the market, but the price placed upon it is rather beyond the means of present purchasers of phosphate lands.

Schultze's Location in South Crosby

Schultze's Location, No. 18.—On this location, in South Crosby, Mr. E. Schultze has made a few experimental openings on the twelfth lot of the sixth concession, near Sand Lake. He has discovered a very fair show of apatite, and already raised about fifteen tons of first quality. Very little prospecting has yet been done in this township, but it is altogether likely that many large deposits of apatite will yet be discovered on the course of the pyroxenic and gneissic belt already alluded to, where it is not concealed by the sandstones of the unconformable Potsdam formation.

Sand Lake is a part of the Rideau waters, and from it the phosphate may be shipped by barges to Kingston, or to any other port on the St. Lawrence.

Cowan's Location, No. 19.—This location in Bedford was first worked in the fall of 1870, and is mentioned in my Report for that year (Report of Progress 1870–71, page 315); since that time there has been more or less work done. On the first lot in the seventeenth concession Mr. Alexander Cowan has opened some exceedingly promising bedded deposits of from two to four feet thick. The strata—consisting mainly of heavy, dark, hornblendic rocks, entirely free from limestone—lie in an almost horizontal position, the incline being to the north-westward. The phosphate is of the red and green varieties, but principally the latter, and is of a very beautiful crystalline character. At the time of my visit about three tons a day were being extracted, and two hundred and thirty tons were piled on the wharf at Opinicon Lake, about half a mile distant from the mine. Altogether there had been mined and raised from this location, up to the fall of 1871, some five hundred and forty-nine tons of first quality phosphate. Mr. Oatey, the superintendent, has recently informed me that there is now visible a thickness of about twenty feet of phosphate, with but very little rock intervening. The beds, however, are very variable in their dimensions, often changing within a few yards from five or six feet in thickness to as many inches.

Cowan's Location in Bedford.

III. *Gold in Marmora.*—The geology of the townships of Madoc and Marmora has already been given in considerable detail in the *Report of Progress* for 1866–69, pages 144 and following. Much additional information, however, and many important facts have been gathered since the publication of that Report, and more particularly during the past summer, The portion of these townships to which I would at present refer, and in which the only mines now being worked for *gold* are situated, is that immediately surrounding the granite area known as the Huckleberry Rocks. These rocks have been shewn (Report of Progress already cited, page 146) to occupy a very large part of the south-western quarter of Madoc, and the south-eastern quarter of Marmora, extending north-westward on the boundary line between these townships as far as the middle of the eighteenth lot, with a breadth of about four miles, the River Moira in Marmora forming their western limit.

Gold in Marmora.

The Huckleberry Rocks.

Surrounding the granite mass, and apparently conforming to its general outline, occurs a series of stratified deposits, consisting of greyish talcoid mica-slates, opaque white and reddish felsites with epidote, greenstones or diorites, ferruginous dolomites, crystalline limestones and rusty quartzites, towards the base of which occur deposits of magnetic iron ore, and small quantities of red hematite. In the talcoid slates are found large bedded quartz veins, holding sulphurets of iron and copper, and native gold. All these deposits appear to me properly to belong to DIVISION R., (Report of Progress for 1866–69, page 145, and Report of Progress for 1870-71, page 310.)

Quartz veins, holding sulphurets of iron and copper, and native gold.

Map.

In the map accompanying the present Report, I have endeavoured to represent the western outline of the granite mass in Marmora, and to show the position of the various openings made for gold in its proximity. It will at once be observed that were a line drawn, connecting these openings, it would represent a zone conforming to the general contour of the granite, and be at a nearly uniform distance from it. The probability of the existence of such an auriferous zone or belt was first pointed out by me in the Report first before cited, which I had the honour to submit to Sir W. E. Logan, early during the year 1867, before openings of any consequence had been made in Marmora. In this Report, after giving a detailed description of the course of the iron-bearing rocks through these townships, pages 150 and 151, I further stated on page 169, that the various localities in which gold had been found appeared to have a nearly uniform relation to the ferriferous belt, "a close proximity to the summit of which" would "in my opinion afford the most probable positions for the discovery of gold." This view has been most satisfactorily borne out by the openings since made in Marmora, all of which, as represented in the accompanying map, occur close to the valley of the River Moira, "the course of which might almost be said to denote its further run through this township." (Same Report, p. 151.)

Uniform relation between the gold and the iron-bearing zone.

Age of the granite.

The age of the granite, on which these gold-bearing rocks rest, is not yet satisfactorily determined. That it is of more ancient date than the latter, is I think clearly shown by the manner in which they repose upon its flanks, and conform to its general outline. My own conviction is, that this, and other like masses of granite met with throughout the Hastings district, represent eruptions which probably took place towards the close of the Laurentian period, or at some time prior to the deposition of the greenstones, schists, dolomites and limestones, of DIVISIONS B. and C. For wherever these higher rocks are wanting, we find the Laurentian gneisses, quartzites, and limestones, where in proximity to, or even at a considerable distance from the granites, cut up by a perfect net-work of veins, which differ from the parent mass only in being of finer texture. This is the case in a very marked manner in the township of Burleigh, Peterboro' county, about twelve miles west of Marmora, where the Laurentian gneisses and limestones are seen intersected in every direction by veins of a pale red syenite, often containing tourmaline, which apparently emanate from the red granite area, known as the Pine Plains, in the township of Methuen; while immediately adjoining these Plains on the east side, in Lake, rocks of the same age as those of Marmora remain unaffected.

Syenite veins.

Mode of occurrence of the gold in Madoc and Marmora.

The general characters of the strata surrounding the Huckleberry rocks in Madoc and Marmora have been already given. In them gold occurs as follows: —

1.—In bedded metalliferous lodes.
2.—In slate bands, impregnated with sulphurets.
3.—In nests, or bunches with quartz and sulphurets in dolomite.
4.—In cross or fissure veins (of minor importance.)

1. *Bedded Metalliferous Lodes.*—As in Nova Scotia, so in the township of Marmora, the most productive quartz lodes are conformable with the stratification. They consist chiefly of translucent vitreous quartz, coarsely crystalline masses of mispickel with black mica, sulphurets of iron and copper, more rarely of zinc, and in one instance oxide of tin. The oxide of tin occurred in a specimen submitted to Prof. James Bell, of Belleville, for examination, who, in a letter to me, dated February 6th, 1871, stated that on one occasion he had found a few small crystals of tin ore, adhering to a specimen of iron ore containing arsenic, and associated with quartz and mica. Unfortunately, the locality from which this specimen was obtained was rather doubtful, but it was among a number sent from Madoc and Marmora. The gold occurs visibly both in the quartz and the mispickel. In the former it is in very minute particles, but in the latter often in irregular lumps of considerable size. The foot-wall is generally the grey talcoid or unctuous mica-slate, and the hanging-wall either a greenstone, or a feldspathic band with disseminated pyrites. In some instances the mica-slate is wanting, and then both walls of the vein are of a dark grey hornblendic gneiss, which is slightly calcareous, as at the Williams mine in Marmora.

Tin ore.

These bedded lodes have been traced continuously all along the Marmora side of the Huckleberry rocks, and are represented in the accompanying map by disconnected black lines. They are not of uniform thickness, but assume more the character of a series of lenticular patches, which in some instances have an extreme thickness of from ten to fifteen feet.

Character of the bedded lodes.

2. *Slates impregnated with Sulphurets.*—These are next in importance to the quartz lodes, of which they generally form the foot-wall, and in some instances both walls. They resemble somewhat the gold-bearing slates of Nova Scotia, and contain interposed layers of vitreous quartz, holding mispickel, sulphurets of iron, and free gold. Sometimes instead of the sulphurets, layers of magnetic oxide of iron occur, to such an extent as to form deposits of economic importance, in which cases the gold and iron are intimately associated in the same horizon, specimens having been obtained in more than one locality, where small grains of the precious metal were seen to be embedded in the iron. In places, on the run of the unctuous slates, occur deposits of steatite or soapstone, a fact which has already been pointed out in my Report for 1870.

Soapstone.

3. *In nests with Quartz in Dolomite.*—This is an exceptional form in which the gold occurs in some few localities, and generally of too irregular a description to be worked with profit. Examples of this mode of occurrence

Limestones and Dolomites.

are the Richardson and Empire mines in Madoc, in both of which instances, although gold was found in comparatively large quantities at the outset —as shown in the Report of Progress for 1866–1869—it was subsequently found to be of too irregular and uncertain occurrence to be mined with profit.

Limestones and dolomites.

It is only towards the summit of the auriferous horizon that limestones and cavernous dolomites make their appearance. Through Marmora, numerous small openings made on the course of the latter have yielded small amounts of gold, more interesting, however, in a geological point of view, than profitable to the miner.

4. *Cross or fissure-veins.*—A few of these cross or fissure-veins, or, as the miners term them, *spurs* and *leaders*, are met with, crossing from one bedded lode to another, and cutting the intervening strata at various angles. In them gold occurs both in the quartz and the sulphurets, but they are generally of so limited an extent that they rather serve as guides to the discovery of the main veins than as workable deposits themselves.

Ore district in the Schwarzenberg, compared with those of Madoc and Marmora.

In *Von Cotta's Treatise on Ore-Deposits*, page 120, he describes a certain ore-district in the Schwarzenberg, Germany, which, in a very marked manner, resembles those of Madoc and Marmora. The Schwarzenberg district consists, according to him, of a series of crystalline mica-schists, through which protrude several masses of granite, "the most important of which is the Rackelmann.....The crystalline schists all have a gentle slope away from this granite dome, so that their lines of strike surround it concentrically. The ore-deposits of this district occur as :

1. Bedded veins, combined with greenstone, and containing many different ores.
2. Hematite lodes.

The bedded veins surround the granite of the Rackelmann also concentrically, as they follow the schistose structure of the mica schist, not as a continuous circle, but as small fragments of rings. These often attain a great breadth in the central portion of their extent; and from this cause approach, in horizontal section, an irregular lenticular form. They are always so firmly combined with the greenstones, that they are only with difficulty separated from them, and are frequently accompanied by granular limestone, or dolomite." This description may be said to apply, word for word, to the Marmora ore-district, which, however, contains in addition deposits of magnetic iron.

Gold-workings in Marmora and Madoc.

During my exploration in 1871, the workings for gold were confined to the Marmora side of the Huckleberry rocks. The feverish excitement which pervaded this district in 1868, has entirely subsided, and is now replaced by steady working in some three or four localities. In Madoc, though similar deposits to those of Marmora are known to exist (Report of Progress for 1866–69), they are unfortunately so much concealed by the

horizontal limestones of the Trenton group, which overlie them unconformably, as to render it impossible to trace out their distribution, or to mine them profitably. A glance at the map accompanying the Report on the county of Hastings (Report of Progress for 1866–1869, page 143) where these higher limestones are represented by the dark blue colour, will at once make this fact evident.

The following is a list of the lots in Marmora, on which work is now, or has recently been in progress, and where openings of some importance have been made; commencing with the most southerly:—

1. The Cooke, or Williams Mine.....	Lot	7	Con.	IX	Marmora.
2. The Gillen Mine.....	"	6	"	VIII	"
3. The Severn Mine.....	"	8	"	VIII & IX	"
4. The Gatling Mine.....	"	9	"	"	"
5. The Hawk-eye Mine.....	"	10	"	"	"
6. The Neill Mine.....	"	14	"	X	"
7. The Powell Mine.....	"	17	"	XI	"

Cooke, or Williams Mine.

The *Cooke, or Williams Mine*, is situated on the south-west corner of the seventh lot in the ninth concession of Marmora, and was mentioned in the list of localities in which the presence of gold had been verified, in the *Report of Progress* for 1866–69, page 168, and again on page 171. The mine is owned by Cooke Brothers, of Toronto, and is superintended by J. D. R. Williams, M.D. It is on a vein of quartz and mispickel, with black mica and suphurets of iron and copper, the whole having an average width of from four to five feet, striking about N. 17° W., and dipping to the westward > 45°. The immediately adjoining rock is a heavy, dark grey, hornblendic gneiss, and the total absence here of the unctuous slate is a noteworthy fact. On this vein, a shaft, six feet by ten, has been sunk to a depth of seventy feet, and levels driven on either side to an extent, in all, of ninety feet. A large quantity of ore, chiefly quartz and mispickel, has been raised; but the greater part of it still lies on the ground awaiting treatment. Up to the winter of 1872, the work carried on here, apart from the mining and raising of the ore, has been chiefly experimental, and although the results arrived at by Dr. Williams, from time to time, exceeded his expectations, he still found by further treatment of the tailings resulting from his mill process, that a large percentage of the precious metal was being lost. The first mill used was one that had formely been worked by Mr. Berry, in the township of Barrie, near the Addington Road, in Frontenac County, but was subsequently sold and removed to Dr. Williams' location. It was of the ordinary form, consisting of one battery with five circular rotating stamp-heads, worked by an engine of fifteen horse-power. I saw it in operation during the month of January, 1870, when some two hundred and fifty tons of ore were put through. The shaft then was sixty feet in depth, and numerous beautiful specimens were shown to me, which had been recently

Character of the vein.

Loss of gold.

extracted, composed of quartz and mispickel, with visible gold. The ore was being calcined in an open kiln, prior to its entering the mill. The kiln, when filled, held forty tons of ore, which it took four days to calcine properly. Before its erection, the ore had been taken to the mill without previous calcination, and a cleaning up, shortly before my arrival, after the treatment of four and three-quarter tons, had resulted in the yield of a little over $10.00 to the ton. This mill remained in use during the ensuing summer of 1870, with variable results, all the ore being first calcined in the open kiln. During the month of September, of the same year, another cleaning up, after the treatment of one hundred and seven tons and three-quarters of ore—quartz and mispickel—yielded $1,035.00. The depth at this time was sixty-six feet, only six feet deeper than during my visit in the previous January, but a considerable quantity of ore had been extracted by *drifting*. Still later, in February, 1871, this lode continued to be worked with profitable results. At this time Dr. Williams made arrangements for the introduction of J. W. Forbes' *Automatic Steam Quartz Crusher*, in place of the ordinary five-stamp mill. This invention was warranted, *with two stamps, and a five horse-power engine, to do the work of an ordinary mill of twenty stamps, with twenty-five horse-power engine.* The patentees further offered to put it up on trial, free of cost, and to remove it if not approved of. It was accordingly put into operation during the month of March, 1871, but, after a very short trial, was abandoned in the ensuing month of April as quite unsuitable, and the old stamps replaced. The open kiln was also set aside, and preparations made for erecting a suitable reverberatory furnace for roasting the ore.

Forbes' Automatic Steam Quartz Crusher.

During the fall of 1871 and commencement of 1872, Dr. Williams was engaged in enlarging and improving his mill, by the addition of fifteen stamps, making in all twenty stamp-heads, and in the erection of a revolving Cylinder-furnace, recently patented by Mr. John H. Dunstan. These changes were completed early in the month of February, 1872, at which time I again visited the mine and collected some further information. About thirty-five men were being employed in the mill and shaft. The mill is erected a short distance to the south-west of the shaft, and close to the east bank of the Moira River, on the sixth lot of the eighth range. The stamps are all of the circular rotating description, arranged in four batteries of five each, and are similar to those in use in many parts of Nova Scotia. They are worked by an engine of fifty horse-power, which is also used to turn the revolving cylinder of the roasting furnace, erected in the same building and close to the batteries. The quartz is crushed in the batteries with water, and the pulverized ore passed over a set of blanket troughs previous to its treatment in amalgamating pans of the Wheeler pattern. The other internal arrangements of this mill are much the same as in stamp-

Dunstan's Revolving cylinder-furnace.

Treatment of the quartz.

SCALE 4 FEET TO 1 INCH.

Fig. 2.

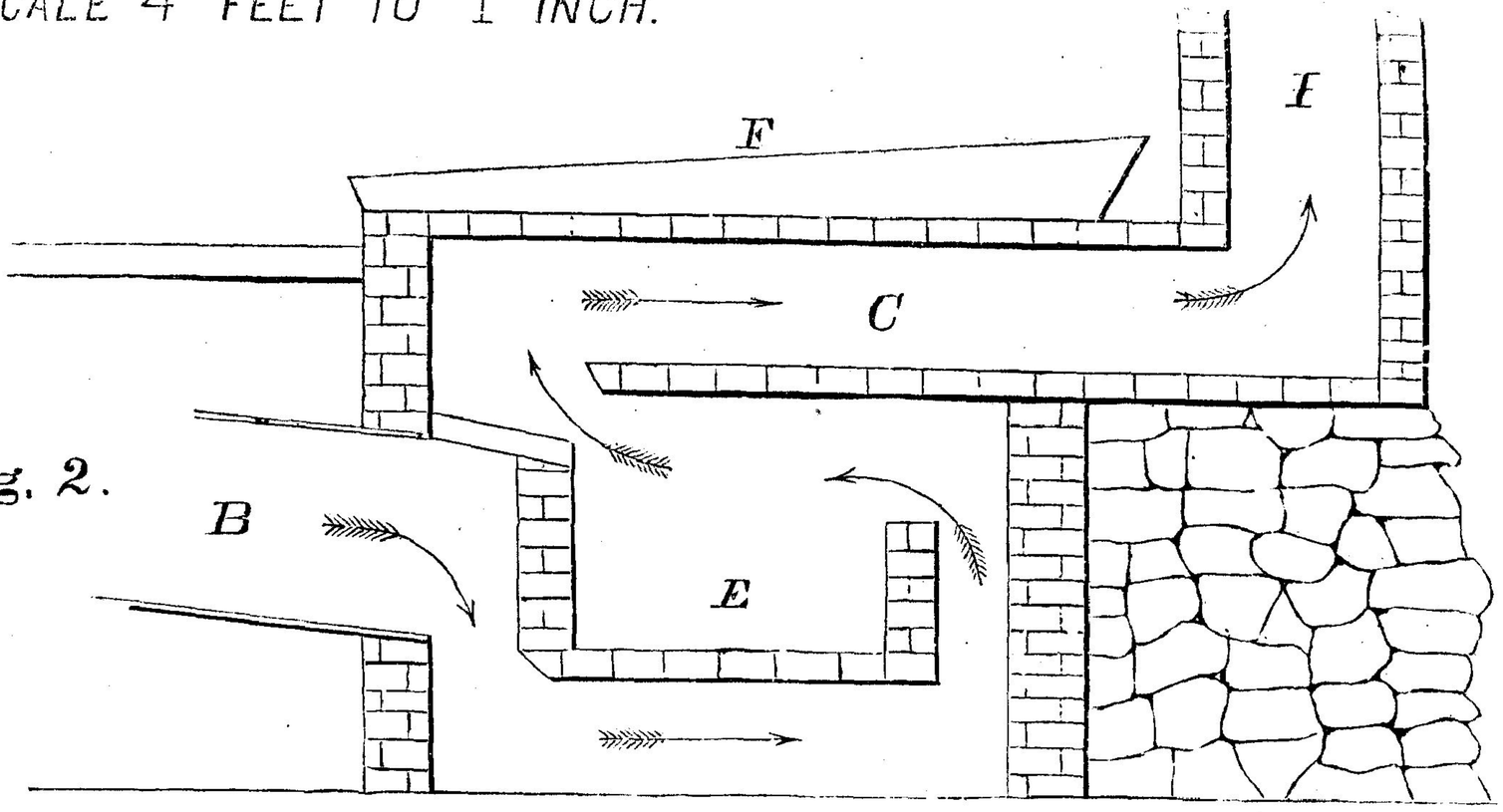
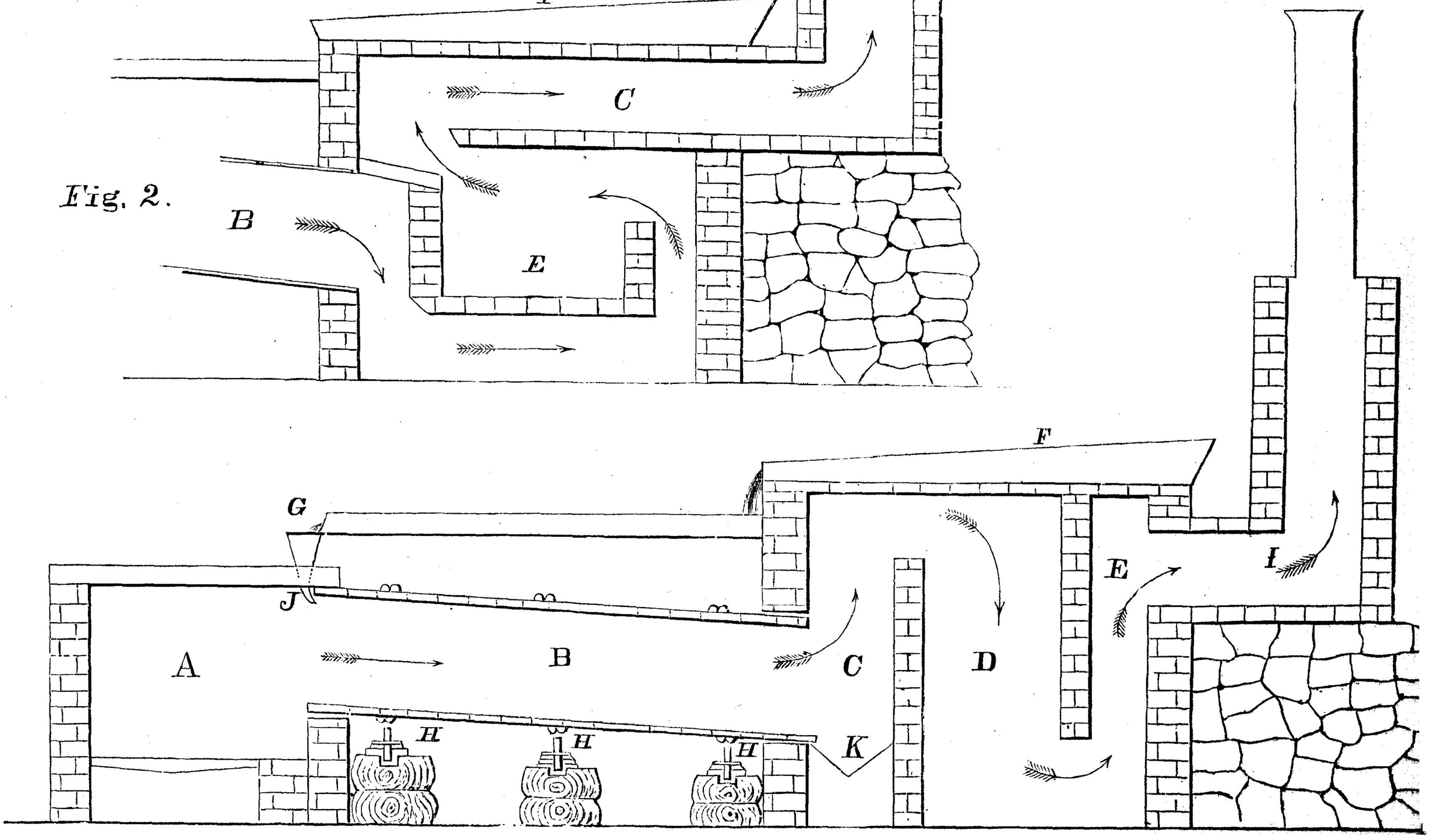


Fig. 1.



mills used in Nova Scotia and elsewhere, and being well known need not be further described.

In the Dunstan Cylinder-furnace no new principle is claimed by the patentee, but merely a simpler combination of those already well known, and applied in the *Stetefeldt*, *Keith*, *Whelpley & Storer*, and *Brückner* furnaces, to which he has added some details of his own invention. The accompanying plan, Fig. 1, drawn to the scale of four feet to one inch, will give a good general idea of the furnace :—

Description of the Dunstan Cylinder-furnace.

In Fig 1, A is a brick fire-box ; B, a revolving sheet-iron cylinder, inclined from the fire-place, and in which are built six shelves of fire-brick, the whole interior being also lined with the same material ; C, a chamber in which is a water trough K, with a running stream of water ; D, a dust chamber ; E, an arsenic condensing chamber ; F, a sheet-iron drying tray or pan, furnished with a mechanical rake ; G, a hopper into which the ore is raked, and from which it passes, through the tube J, into the cylinder, being at the same time scattered by a fan-blast, from another tube enclosing J ; H H H are friction rollers on which the cylinder B revolves ; I, the flue.

The pulverized ore, coming from the batteries wet, is spread out in the drying pan F, being at the same time slowly raked towards the hopper G, from which it passes into the cylinder. The cylinder turns at the rate of five revolutions per minute, or faster if necessary, and in it the ore is tossed from shelf to shelf through the flame, which passes through the centre, and, after about twenty revolutions, reaches the further extremity, and falls into chamber C, and the tank K. In this tank or trough, Mr. Dunstan contends that the pulverized and roasted ore is yet more finely divided, and is also freed from a coating which appears to render it unfit for amalgamation. In any case, the tank, if of no other use, saves a considerable amount of manual labour, as the water passing through it carries the ore to the amalgamating pans. Instead of chambers C, D and E, Mr. Dunstan has devised another plan, Fig. 2, dispensing with the tank, and in which the pulverized mineral passes at once into a chamber, where it is treated as in an ordinary reverberatory furnace, and which has also combined with it a chamber E, for condensing the arsenic.

Cost.

The cost of erecting this furnace is nearly as follows :

Iron-work	$200.00
Fire-brick (6,000)	60.00
Sand and lime	25.00
Labor	90.00
Total	$375.00

All the iron-work is protected from fire and fumes by fire-brick. Respecting the working of this furnace, but little can be said at present, it having been so short a time in operation. That it has defects, and that

it will yet require some very important alterations, seems to me evident; but the fact that it has already effected a considerable saving in gold, indicates the trial to be in the right direction.

At the time of my last visit to the 'Williams' mill, the furnace had hardly been fairly put into operation, but after some weeks working, Mr. Dunstan furnished me with the following information. The furnace burns one cord of soft wood in twenty-four hours, and the whole of its machinery and connections can be worked by about two and a-half horse-power. From partially concentrated tailings—say 60 per cent. of sulphurets—which had previously yielded from $9.00 to $11.00 per ton, a trifle over $18.00 per ton was extracted, after treatment in this furnace. The average yield of the ore as it comes from the mine would appear to be from $17.00 to $20.00 per ton.

Oxland's furnace.

A furnace which would, perhaps, much better suit the ores of Marmora is one known as '*Oxland's furnace*,' in very general use both in Europe and America. In this, the revolving cylinder inclines in the opposite direction to '*Dunstan's*,' namely, towards the fire place, instead of from it, the ore being introduced at the end farthest from the fire, and brought from lesser to greater heat; whereas, in the furnace first described, the ore being introduced into the flame is subjected to an extreme heat at the outset, and gradually cools on its passage through the cylinder.

The Gillen Mine.

2. The *Gillen Mine* is situated in the north-eastern corner of the sixth lot, in the eighth range, and about twenty-four chains south-west of the Williams shaft. The lode is a parallel but somewhat higher one in the series than the one last described, being separated from it by about seven hundred feet of a grey hornblendic rock, surmounted by a band of greenish-gray talcoid slate. It is clearly an interposed or intercalated lode, striking with the associated rocks to the west of north (N. 17°—20° W.) and dipping to the westward 30°—35°, and is from four to six feet wide. The foot-wall is the talcoid slate with interposed layers of quartz and sulphurets, and the body of the vein is chiefly quartz, carrying about 10 per cent. of mispickel, with sulphurets and free gold. The rocks immediately overlying this, are greenstone and opaque white felsites, above which occur dolomite and limestone.

During the year 1870, a mill of five stamps, worked by water-power, which had formerly been in use at Eldorado in Madoc, was used by Mr. William Gilbert in connection with this mine. Two small openings were at this time made in the vein, and some ore extracted, of which about two hundred tons were put through the mill, and returned from $5.00 to $9.00 per ton. Mr. Dunstan, however, succeeded afterwards in obtaining upwards of $20.00 per ton, from samples of concentrated ore, which had already been twice worked through this mill. Shortly after, owing to the breaking down of the water-dam, work was suspended on this location.

In 1871, Mr. Andrew White, contracted to raise one hundred tons of ore from the Gillen lode, which was to be tested in the mill at the Williams mine. An opening was made on the course of the vein, of about fifty feet in length, five or six feet in width, and of irregular depth, the lowest point reached being about twenty feet, and the cost of mining and raising the ore only $1.50 per ton. The mill return on the one hundred tons averaged $6.00 per ton, which, there is very little doubt, was considerably less than the actual contents of the ore. The property is now in the possession of W. J. Gatling and partners. Numerous laboratory assays have been made of the ore from this mine, and are reported to have shown a large yield in both gold and silver. The assays given below are taken from a Report on this location recently made by Professor E. J. Chapman, of University College Toronto.

Assays by Professor Chapman.

Professor Chapman says: "In order to obtain a fair average sample of the vein, as at present opened, I had two blasts put in at a distance of about twelve feet apart, and about six feet below the surface of the ground. From the fragments thrown out by these blasts, I broke off between 30 and 40 lbs. of ore, taking a piece or two from each fragment.

"A single trial-assay made from a selected piece of the pyrites, free or nearly so from quartz, (but in which no visible gold could be detected by the magnifying glass), gave me, per ton of 2000 lbs., the extraordinary yield of 8 oz. 3 dwts., equivalent to $168 per ton.

"This, however, can scarcely be regarded as a fair criterion of the yield of the vein, and it is only mentioned here to show the actual amount carried by some portions of the ore. But the following results were obtained from portions broken fairly from every piece of the ore thrown out by the two shots or blasts, (from all, at least, that could be collected.) Several fragments were thrown to a great distance, and oculd not be found.

"ASSAY 1.—(Portions of powdered ore from both shots.)

Gold.....6 oz., 10 dwts., 16 grs.=$134 per ton of 2000 lbs. of ore.
Silver.....9 dwts, 8 grains.

ASSAY 2.—(Portions of powdered ore from both shots.)

Gold.....6 oz., 8 dwts., 8 grs.=$132.56 per ton of 2000 lbs. of ore.
Silver.....7 dwts.

Average yield of gold per ton of ore=$133.28.

"These results, obtained by the most scrupulously fair treatment of the ore, are decisive as to the general richness of the vein. If at other parts at present unopened, the yield sink to even a third or fourth of the above, the ore would still be of more than average quality."

General richness of the vein.

During the summer of 1867, while engaged in mapping the distribution of these gold bearing rocks in Marmora, I succeeded in tracing the Gillen vein through the seventh, eighth, ninth and tenth lots, in the eighth con-

cession, its course being plainly indicated by broken fragments of rusty surface-quartz, holding mispickel. Through lots nine and ten the course changed from N, 17° W. to almost north and south magnetic, and the vein disappeared beneath an extensive swamp in the south-west corner of lot eleven, in the ninth concession, beyond which all trace of it was lost for some distance, owing to low swampy ground, which continues northward through lots eleven, twelve and thirteen of the same concession. On reaching, however, the fourteenth lot, in the tenth concession, I again found loose fragments of quartz and mispickel, and shortly afterwards, on the same lot noted a well defined vein, striking N. N. E., doubtless the continuation of that already traced up to the swamp commencing on the eleventh lot of the ninth concession.

The Severn Mine.

(3). The *Severn Mine* is situated half way up the line between the eighth and ninth concessions, about the eighth lot, but no work has been in progress recently. At the time of my visit, the shaft, which has, been sunk to the depth of about fifteen feet, on a vein of quartz and mispickel, was filled with water; but, from an examination of the immediately adjacent strata, the vein appears to me to be on the run of that from the Williams shaft. During the winter of 1870, about three hundred tons of ore from this mine were put through a small stamp-mill, which had formerly been in use at Eldorado, and I am informed that yields have been obtained, varying from $4.00 to $12.00 per ton.

The Gat'ing Mine.

4. The *Gatling Mine*, the property of W. J. Gatling and partners is situated on the north-eastern corner of the ninth lot, in the eighth concession of Marmora. It is on a bedded vein, striking nearly north and south magnetic, and having a dip to the westward $< 30°$. The vein is composed largely of white translucent quartz and mispickel, with abundance of a very black mica, and has an average width of from seven to ten feet. On this lode, besides a number of small openings, two shafts have been

Character of the vein.

sunk, No. 1, to the depth of sixty-eight feet, and No. 2.—eighty feet distant from No. 1.—to the depth of sixty-four feet. Another shaft, No. 3, has been sunk on a parallel vein, three hundred feet west, to the depth of twenty feet. The foot-wall of both these veins is composed of a greyish-blue nacreous or talcose schist, similar to that accompanying the Gillen vein; it is intercalated with layers of quartz and sulphurets, through which gold is very frequently visible. The hanging-wall is a greenstone or diorite with disseminated pyrites. In making a section across the north-eastern quarter of this lot, there appeared to me to be evidence of at least three distinct and parallel ore-zones, within a distance of three hundred feet, in each of which gold had been found by Mr. Gatling and Mr. O'Neill. These zones are separated from one another by bands of greenstone, felsite and slate.

Limestone.

Limestones do not occur in their immediate vicinity, but rather more to the westward, and a few hundred feet higher in the series.

From shafts Nos. 1, 2, 3, about two thousand tons of ore have been mined and raised, of which the greater part still lies on the ground awaiting treatment. From this pile, however, Mr. Gatling has sent to Mr. Balbeck & Brothers, of Newark, N. J., two barrels of samples, amounting to about 1700 lbs.—one lot, representing ore taken from the east, and the other from the west vein. By smelting, Mr. Balbeck obtained from the former about $28.00, and from the latter upwards of $30.00 per ton, $4.00 of which was in each case silver. Numerous beautiful shows of gold were found all along the course of the veins on this lot by both Mr. Gatling and Mr. O'Neill, who also panned out considerable quantities of gold from the decomposing ferruginous vein-stuff. Mr. Gatling has made many improvements on the property, having cleared over six acres, and erected a number of substantial and neat frame buildings in proximity to the shafts. Among these, are a dwelling-house, a boarding-house with accommodation for thirty workmen, a work-shop, stable, carriage-house, and smith's forge. A good road has also been constructed, connecting with the main travelled road from Madoc, to the village of Marmora. Preparations have already been commenced by Mr. Gatling for the erection of a twenty-stamp mill and suitable roasting-furnace, and there is little doubt but that this mine will be in full working order within a very few months. Follow-on the strike of these bedded lodes in a northerly direction, we next come to the Hawk-eye Co.'s mine.

Yield of gold by smelting.

Improvements.

5. The *Hawk-eye Co.'s* mine is situated on the east quarter of the tenth lot, in the eighth range, and less than one-quarter of a mile north of Mr. Gatling's mine. Here, gold occurs under conditions similar to those last described. Slate, greenstone and felsite bands are interstratified and accompanied with veins or beds of quartz and mispickel. Two shafts have been sunk on one of these veins by Mr. Jones of Iowa, one to the depth of forty-six feet, and another to thirty feet. From these openings a considerable amount of ore has been raised, but has not yet been milled. During my visit no work was in progress, but I was informed that operations were to be commenced early in the spring of 1872, on the return of the proprietors. Beyond this lot the gold-bearing zones are lost sight of, in the swamp already noted as covering the greater portions of the eleventh, twelfth, and the thirteenth lots, of the ninth range. Proceeding northward we next come to Neill's mine.

The Hawk-eye Company's Mine.

6. *Neill's Mine* is situated on the west half of the fourteenth lot, in the tenth concession of Marmora. I discovered and traced out the vein on this lot in September, 1867, before any mining locations were being worked in Marmora. Specimens of quartz with mispickel, brought down at that time, and subsequently examined, yielded me by assay, in the laboratory of the Geological Survey Office, upwards of $5.00 to the ton. During the years 1870 and 1871, an opening was made on the vein by Mr.

Neill's Mine.

Neill, the owner of the lot, but with what result, I have not been informed. The geological conditions of this deposit resemble those of the Williams vein, on the seventh lot of the ninth concession. It almost immediately borders on the great granite area existing to the eastward, but from which it is separated by a granitic and greenstone breccia, to which I have already referred. (Report of Progress for 1866–69, pages 146, 147.) There is little doubt but that mispickel zones or belts carrying gold will yet be discovered above the horizon of Neill's vein, on the eastern portion of the fourteenth lot in the ninth, and probably on the western portion of the fifteenth lot in the tenth concession, corresponding with the upper zones on the Gatling lot.

The Powell Mine.

7. The *Powell Mine* is situated about one mile and a-half N. N. E. from *Neill's* mine, being on the western portion of the seventeenth lot of the eleventh concession of Marmora, and more or less work has been done there since the year 1867. During the fall of 1866, while mapping the distribution of the ferriferous belt of rocks through Madoc, I succeeded in tracing a band of sulphurets—mispickel and iron pyrites—through this lot, and noted the occurrence of some deposits of magnetic iron-ore. (Report of Progress for 1866–69, page 151.) A shaft, now about fifty feet deep, has been sunk on a vein of quartz and mispickel, in greyish talcose slate, which strikes nearly due north and south, magnetic, and dips to the westward $<25°$—$35°$. The vein is said to average about ten feet in width. A temporary stamp-mill with five stamps, worked by an engine of twenty horse-power, has been erected for testing the ore. The pulverized mineral is roasted in a small, ordinary reverberatory furnace, previous to its treatment in the mill. Mr. Jenkins, who is at present superintending the work informs me that the mill crushes about five tons in the twenty-four hours. The proprietors intend, however, should they meet with sufficient encouragement, to erect a mill of at least twenty stamps. Only a small quantity of surface ore has yet been operated on, but has yielded on an average about $5.00 to the ton. Some seven or eight men are at present employed on the location.

The table on the following page contains the results of assays made by Dr. B. J. Harrington, in the laboratory of the Geological Survey Office. The specimens were all collected by myself, with the exception of the ore from the Cooke or Williams mine, and the poorer of the tailings from the same place.

I have the honor to be,
Sir,
Your obedient servant,
HENRY G. VENNOR.

Geological Survey Office,
1st May, 1872.

ASSAYS BY DR. B. J. HARRINGTON.

In the foregoing Report nothing is said with regard to gold localities outside of Marmora; but a few specimens from the Townships of Levant and Elzevir having been examined at the same time as those from Marmora, it has been thought advisable to include the results in the following table. In most cases silver was absent, or, if present, occurred in such minute quantity as to be of no economic value :—

Names of Mines or of Proprietors.	Township, Lot and Range.	Character of Ore.	Ounces of Gold per ton 2000 lbs	Value per ton. (2000 lbs.)	Remarks
Gillen Mine.....	Marmora, 6, 8.	Mispickel and quartz	4.90	$101 23	A vein worked at present.
" " ...	" "	Mispickel and quartz	0.6125	12 65	Not from the same vein as the above.
Gatling Mine...	" 9, 8.	" "	3.736	77 18	Now being worked.
Williams & Co.	" 8, 9.	Ordinary and magnetic pyrites with chloriticmatter.....	No trace of gold or silver.		Occurs in magnetic iron in the vicinityof the Marsh Ore Bed.
" ...	" "	Finely granular mispickel	"		This, like the last, was a surface specimen, no openings having been made.
Cooke or Williams' Mine.	" 7, 9.	Mispickel and Vitreous quartz.	4.14	85 53	Worked at present.
" " ...	" "	Concentrated tailings form Dr. Williams' Mill, chiefly quartz and mispickel.....	0.8458	17 47	Trials on a large scale are said to have yielded a much larger amount of gold; but the quantity of course varies according to the degree to which the tailings have been concentrated.
" " ...	" "	Similar to the last, but not so well concentrated.....	0.466	9 71	
Williams, Dean & Co.	" 20 5.	Mispickel with a little quartz.....	1.545	31 92	From a locality not yet described, and belonging apparently to a different horizon from any of the above.
B. Hutchins, Esq.....	Levant, 6, 7.	White quartz with chlorite and copper pyrites.....	No gold or silver.		Some years ago a few small openings were made on this and the following lots for copper.
" "	" 4 or 5, 7.	Fahlband.....	Trace of gold		
" "	" 8, 7.	Compact quartzose dolomite, holding sulphides of iron and copper.....	0.255	5 27	

REPORT

OF PROGRESS

OF GEOLOGICAL INVESTIGATIONS

IN

NEW BRUNSWICK.

BY

PROFESSOR L. W. BAILEY, A.M.,

ADDRESSED TO

ALFRED R. C. SELWYN, ESQ., F.G.S.,

DIRECTOR OF THE GEOLOGICAL SURVEY OF CANADA.

SIR,—In accordance with a request conveyed to me in your letter of the 4th inst., I beg leave to lay before you the following general statement of the progress of geological investigation in this Province during the summer of 1871, and some of the results at that time obtained.

Geological Map.

Having been honored with your instructions, in the month of May last, to direct my efforts during the ensuing season towards the preparation of a geological map of southern New Brunswick, supplementary to, and illustrative of the general Report submitted by Mr. Geo. F. Matthew and myself relative to that region, the greater portion of my time was devoted to the obtaining of the materials necessary for that purpose. With this object in view, not only was attention paid to the more accurate limitation of the different groups of strata in the region to which that Report particularly relates, but an effort was at the same time made to trace them in their eastward extention through the counties of St. John, King and Albert, of which but a limited portion had been previously examined. Many additional details, relative both to the character and distribution of the formations in question, were thus obtained. Before attempting, however, to represent these, and the previous conclusions, in pictorial form, it seemed essential that certain difficulties, to which reference has been made in the preceding Report, and upon the solution of which depended the correct delineation of considerable areas within the region under consideration, should, if possible, be removed. In endeavouring to effect this object, I have, during a portion of the summer, been accompanied by

Assistance from Dr. T. S. Hunt.

Dr. T. S. Hunt, to whom I am indebted for much valuable advice and assistance. Though adding much to our previous knowledge

upon the subject, I regret to say that our labours in this direction have not as yet proved entirely successful, several important questions still remaining, for the solution of which additional study is required. Under these circumstances, and until such investigation shall have been made, it has been thought advisable to defer for the present the farther preparation of the map alluded to, the presentation of which has, accordingly, and with your consent, been postponed.

Among the subjects remainiug open for determination is that relating to the age and relations of the different bands of schistose rocks lying to the northward of the great belt of intrusive granites which traverse the central portion of Charlotte, and parts of King's and Queen's Counties, and in some of which organic remains [See Report of Progress, 1870-71] of Upper Silurian and Devonian aspect have been observed. This determination is the more important from the fact that upon it depends also the determination of the age of similar strata extending over large districts in the central and northern portions of the Province. The latter were observed by Dr. Gesner, Sir William Logan, Professor Hind and others, as well as by the writer, and in them Mr. Charles Robb has recently discovered fossils belonging to a type similar to that of the organic remains mentioned above. It is accordingly proposed, with your permission, to devote a portion or the whole of the coming season to a minute and critical study of the region in question, with a view to determine whether more than one series is here represented, and, if so, to ascertain their true age and relations.

A second subject, to which a considerable share of my attention has been devoted during the past season, is that of the Huronian series, more particularly as regards the features and distribution of its different subdivisions in the hilly region lying to the eastward of the city of St. John, and along the northern shore of the Bay of Fundy. Among the more important results attending the examination of this region may be mentioned, the confirmation of the view expressed in the Report of last year, as to the probable identity of the rocks of eastern St. John county with those to which the designation of the "Coastal Group" has been applied in other parts of the southern metamorphic district, as well as the recognition of the latter in portions of King's, and over a large part of Albert County. The rocks in question being those in which are contained the principal deposits of copper ore in the last-named county, as well as in that of St. John, this recognition is important, not only as establishing their relationship to the similar copper-bearing rocks of Charlotte, but also as indicating the wide area over which such deposits may be looked for. It should, however, be mentioned that, although indications of this metal have been observed at many different points over this region at but few of these does it appear to be present in quantities sufficient to warrant its profitable extraction. Where most abundant, it

Huronian series.

Copper-bearing rocks.

is usually in connection with the more chloritic members of the group, especially where these, as in the southern part of the parishes of Alma and Harvey, in Albert county, are associated with granitoid and dioritic rocks.

Allusion may be made in this connection to the probable want of conformity between the coast rocks last mentioned and those of the Coldbrook group, as indicated by the want of parallelism in their geographical distribution, and the entire absence of the former, as far as known from among the folds by which the latter has been made to spread over so extensive an area. It is to be observed, however, that no direct proof of such uncomformability has as yet been obtained, the contact of the two groups being obscured in all those cases where an attempt has been made to determine their relations, in some instances by over-lying Carboniferous or Devonian sediments, and in others by the presence of intrusive syenites.

In addition to the subjects referred to above, and upon which farther information is required, the following may be mentioned as among other results of the last season's explorations :—

(1.) The determination of the exotic origin of much of the so-called granite of southern New Brunswick. In addition to that of the Nerepis Hills and the St. Croix River, alluded to last year, may be mentioned

Exotic granites.

several large areas of such rocks in eastern King's and Albert Counties, not before represented in the geological maps of the Province. On the western frontier the intrusion of these masses (which include both true granites and imperfect syenites, the latter usually of a bright red colour) has been in part through the mica-schists and imperfect gneisses, to which allusion has been made in a preceding paragraph as of uncertain age, and in part through dioritic rocks, holding serpentine and diallage, which, on lithological grounds, are regarded by Dr. Hunt as probably Huronian, those of the last named counties are in part through the petrosilicious rocks of the Coldbrook series, and in part through the chloritic and nacreous schists of the Coastal group.

Carboniferous rocks.

(2.) The existence of a considerable area of true carboniferous rocks, marked by the presence of plants of the type of the Middle or Upper Coal formation, in the eastern part of King's County, and indications of a probable want of conformity, both in this county and in that of Albert, between the coal measures and the Lower Carboniferous formation. Excavations made several years since in the rocks first mentioned (at Dunsinane Station, on the line of the European and North American Railway), showed

Coal.

the presence, near the surface, of thin beds of coal, similar in composition to that of Springhill in Nova Scotia, but the locality has not yet received the attention which it apparently deserves.

Trappean rocks.

Lastly, the occurrence of trappean rocks similar to those of the North Mountains of Nova Scotia and of the island of Grand Manan, near

Shepody Mountain in Albert County, an observation of some interest as tending to confirm the view expressed by Mr. Matthew and myself in earlier publications as to the Mesozoic age of a portion of the red sandstones occurring along the north shore of the Bay of Fundy.

Fuller details upon the several points above referred to are, with your permission, reserved until a more complete examination shall have been made of the districts to which they relate.

I have the honour to be, Sir,

Your most obedient servant,

L. W. BAILEY.

RECORDS OF MINES AND MINERAL STATISTICS,

COMPILED BY

MR. CHARLES ROBB.

THE following Tables exhibit in a concise form the results of Mining operations during the last three years throughout the Dominion of Canada and the British American Provinces. They have been compiled chiefly from information obtained by the Officers of the Geological Survey, under the arrangement specified in MR. SELWYN'S SUMMARY REPORT, addressed to the Legislature, and dated May 2nd, 1870, pp. 13 and 14; and partly from the Reports of the Commissioner of Mines for Nova Scotia, supplemented by other authentic sources of information. In some cases, in order to render the Tables more complete and uniform, it has been deemed necessary to fill up some of the items by estimating according to the compiler's best judgment. In such cases, the figures are marked by an asterisk. It is to be regretted that the returns are so incomplete as to render such an expedient necessary; and it is hoped that, when the importance and value of such records are duly recognized, the parties more immediately interested will give their cordial co-operation. These Tables comprise the records only of such mines as have been in operation during the whole, or any part of the three years referred to; and in some instances where it has been impossible to obtain any information all notice has necessarily been omitted. In the column indicating the year, the brackets denote that the "aggregate" production, number of men, etc., for each year of all the mines of the class referred to is recorded.

TABLE I. — PROVINCE OF ONTARIO.

Description of Mineral Product.	Designation of Property or Company.	LOCALITY. Lot, Range, Township, County.	Year.	Number of Men.	Number of Horses	Engines. No.	Engines. H. P.	Value of Plant and Machinery.	Quantity Produced.	Value of Product at the Mine.	Destination of Product. D.C	U.S	G.B	REMARKS.
								$		$				
GOLD.....	Cook Mine.....	7 in 9th, Marmora, Hastings.....	3 yr	36	6	1	20	10000	*500 oz.	9250	All	....	....	In operation during three years.
SILVER ORE	Silver Islet Mining Co...	Woods Location, Thunder Bay, L. S.	1869	5	1	....	.....		10791 lbs.	69760	....	1/5	4/5	First opened by Montreal Mining Co.; afterwards sold to American Co.
	" " " "	" " " " .	1870	77	4	1	40		172825 "	105328	....	All	....	
	" " " " ...	" " " " .	1871	40	3	1	40	*30000	969454 "	645897	....	All	....	Total to end of 1871, $820,485.
	Thunder Bay " " ...	Thunder Bay, Lake Superior.....	1869	50	4	2	30		3294 "	2592	All	....	....	Operations suspended since 1869.
LEAD ORE.	Frontenac Lead Co.....	S. ½, 16 in 9th, Loughboro', Frontenac	1869	32	4	1	40	17200	*550 tons	4100	All	....	....	Do, Do
	Peterboro' Lead Co.....	W. ½, 20 A, Galway, Peterboro'.....	1869	10	1	....	....		167 "	2000	All	..	..	Work suspended, but to be resumed.
IRON ORE†.	Chaffey & Mathews Mines	Near Newboro', Crosby, Leeds....	1869	110	6	3	40		22720 "	56800	....	All	....	Has been worked for many years
	Blairton Iron Mines.....	8 in 1st, Belmont, Peterboro'.....	1870	135	23	3	40	114000	17720 "	44300	....	All	....	Cobourg, Peterboro', M'mora Co
	Cowan Iron Mines.....	E. ½, 1 in 4th, Dalhousie, Lanark...	1871	122	8	3	40		25000 "	62500	....	All	....	Worked since 1868.
IRON PYRITES...	Elizabethtown Mine.....	19 in 2nd, Elizabethtown, Leeds.....	1870	5	3	....	....	500	460 "	*3000	All	....	....	Used at Brockville with produce of two following phosphate Mines, in manufacture of Superphosphate (685 tons in 1870,
	Do do ..	Do do do	1871	5	3	....	....		150 "	1000	All	....	....	
PHOSPHATE OF LIME..	Brockville Chemical Co..,	9 and 10 in 7th, Burgess, Lanark.....	1870	10	6	....	....		400 "	5200	1/12		1/12	
	Victoria Phosphate Mine	12 in 7th, " "	1870	12	3	....	....	1200	800 "	8400	1/3	6	1/3	
	Cambrian " "	W. ½, 13 in 6th " "	1871	18	3	....	....		200 "	2100	....	....	All	
PLASTER..	Grand River Plaster Beds	Near Cayuga, Haldimand.....	1869	22	3	....	....		5000 "	10000	All	....	....	In operation for many years, with little variation in production.
	Alexander Taylor's "	Near Yorkville, Seneca, Haldimand	1870	22	3	....	....	15000	5000 "	10000	All	....	....	
			1871	20	3	....	....		4250 "	8500	All	....	....	
HYDRAULIC CEMENT..	Brown's Quarry and Mill	Thorold, Lincoln.....	1869	8	2	1	40		17000 bu.	3825	All	...	....	
	Napanee " " "	Near Napanee, Lennox	1870	26	16	1	35	28000	22000 "	4950	All	....	....	Do. Do.
			1871	28	16	1	35		52000 "	11700	All	....	....	
MICA	New York Mica Co.....	16 in 9th, North Burgess, Lanark.....	1869	22	2	....	.....	250	4000 lbs.	8000	1/7	6/7	....	But little worked since 1870.
PETROLEUM..	Enniskillen Companies...	Petrolia, Enniskillen, Lambton.....	1870	5825	750	400	*6000	1700000	300000 bls	375000	½	....	½	The return for 1870 is the only one obtained.
SALT.....	Huron & Bruce Co.'s....	Salt Wells in Huron and Bruce Cos.	1869	200	20	10	200	100000	90000 "	108000	All	....	....	
			1870	*200	20	10	200	*140000	100000 "	120000	All	....	....	Production limited from want of adequate market.
			1871	*150	15	10	200	*160000	70000 "	73000	All	....	....	
COPPER ORE.	West Canada Co.....	Lake Huron.....	1869	173	5	6	387	170000	2180 t'ns	141000	....	....	All	Recently this Co. have erected at their mines works for the reduction of the copper, in part by a humid process.
			1870	205	9	6	387	237000	1945 "	118645	....	....	All	
			1871	194	6	6	387	257000	2356 "	117800	....	....	All	
		Annual Average.....	....	6495	820	423	6734	2,270,817	....	966982	....	....	....	

In the Township of Marmora, in Hastings County, within the last three years, most important discoveries of auriferous veins have been made and operations commenced for developing them on an extensive scale, and with good prospects of success.

In the Thunder Bay silver region also, Mining operations are in progress at several other points besides those indicated, and most important results are anticipated; but with the exception of those in the table, no authentic records have as yet reached us. In Marmora, a quarry of excellent lithographic stone has lately been opened, and in Burgess a plumbago mine and mill are in successful operation, of which we have no specific details.

† For other facts with regard to Iron Ores and Phosphate of Lime, see Mr. Vennor's Report.

TABLE II.—PROVINCE OF QUEBEC.

Description of Mineral Product.	Designation of Property or Company.	LOCALITY. Lot, Range, Township, County.	Year.	Number of Men.	Number of Horses	Number of Engines. No.	Number of Engines. H. P	Value of Plant and Machinery	Quantity Produced.	Value of Product at Mine.	Destination of Product. D.C	Destination of Product. U.S	Destination of Product. G.B	REMARKS.
								$		$				
Gold	Chaudiere Gold Mining District	Seigniory Vaudreuil, Beauce	1869	40	....	....	.....	20,000	1050½ oz	18,909		....	....	The produce of desultory alluvial washing; a quartz crushing mill has been erected, but is not now in operation.
	Do. Do.	Do. Do.	1870	21	....	....	.....	20,000	581½ "	10,467		....	....	
	Do. Do.	Do. Do.	1871	12	....	....	.....	20,000	115 "	2,070		....	....	
Copper	Harvey Hill Mine	17 in 15th, Leeds, Megantic	1869	342	46	5	190	120,900	12800tns	150000	½	5	½	Owing to the low price of copper, these mines have been worked on a very limited scale during the last three years.
	Capel and Hartford Mine	3, 4, in 8th, 9th, Ascot, Richmond	1870	187	36	5	190	120,900	10568 "	137447	½	5	½	
	Huntingdon & Ives do.	8 in 8th, 9 in 9th, Bolton, Brome	1871	60	10	5	190	120,900	3714 "	46.370	....	5	½	
Iron	Forsyth Iron Mine	11 in 7th, Hull, Ottawa	1869	376	40	4	200	*100,000	10400tns	72.250	5	1/6	....	The production of the St. Maurice Forges averages 2000 tons of pig iron annually.
	St. Maurice, St. Joseph, and	Champlain County	1870	376	40	4	200	100,000	10400 "	72,250	6	1/6	....	
	St. Francis Iron Mining Cos.	Yamaska County	1871	390	50	4	200	100,000	15400 "	93,924	5/6	1/6	....	
Plumbago	Canada Plumbago Co.	28 in 6th, Buckingham, Ottawa	3yrs	18	4	1	50	*50,000	450 "	*60000	⅔	⅓	....	Worked only on a limited scale.
Roofing Slate	Melbourne Slate Quarry	22 in 6th, Melbourne, Richmond	1869	60	8	1	8	3,500	7670 sqs.	32,600	⅔	⅓	....	The Danville school-slate quarry is in operation, but no authentic returns have been obtained.
			1870	72	8	1	8	3,500	4568 "	19,414	⅔	⅓	....	
	Rockland do do.	22 in 4th, Do. Do.	1871	56	6	1	8	3,500	4765 "	19,625	⅔	⅓	....	
Hydraulic Cement	Orleans Cement Works	Parish St. Pierre, Orleans Island	3yrs	14	....	1	16	11,000	3000 bls.	4,200	All	....	....	This is the annual production, &c., which varies very little from year to year.
Peat	Canada Peat Fuel Co	Chambly, Napierville, Missisquoi	1869	500	6	5	83	70,000	14000tns	42,000	All	....	....	Operations latterly confined to the St. Hubert and Ste. Brigide bogs.
			1870	600	7	5	83	70,000	16000 "	48,000	¾	¼	...	
	Champlain Peat Bog	Champlain Parish, Seigniory & Co.	1871	600	7	5	83	70,000	10300 "	30,900	All	....	....	None produced in 1871 from this bog.
Soapstone	Slack & Whitney's Mine	24 in 7th, Bolton, Brome	1871	4	....	1	10	8,000	300 "	1,800	"	....	....	Mine only opened late in 1871.
		Annual Average	....	1264	93	17	550	376,400	.....	330,209	....	....	....	

In addition to the above we have to note the following, of which, however, we have no authentic details:—

1st.—In the Chaudiere Gold District, besides the desultory operations of which the results are given above, an English Company have acquired territorial rights, and the use of the crushing mill referred to, with a view to extensive and systematic working, both in the alluvium and quartz rock. Owing, however, to various accidental causes, these works are not yet in full operation, and consequently we have no definite results to record.

2nd.—The works carried on by Mr. M. Molson and others at River Moisie and at Montreal, for the manufacture of axles and other wrought iron articles from the iron sands of Moisie.

3rd.—An establishment at Quebec, for the manufacture of steel by a new process, from the iron sands, under the direction of M. Labreche Viger, not yet in full operation.

4th.—There is a mill at the Chaudiere Falls, near Ottawa City, for the manufacture of hydraulic cement from the Nepean limestone.

5th.—The mica mines, near Grenville, have been worked on a small scale for several years, and Mr. J. S. Miller is now working a plumbago mine in the same locality.

TABLE III.—PROVINCE OF NOVA SCOTIA.

COAL.

Summary of the Production of Coal in each County in Nova Scotia and Cape Breton in 1869-70-71, condensed and compiled from Official Records contained in the Reports of the Chief Commissioner of Mines for the Province of Nova Scotia.

COUNTY.	Year.	Number of				Aggregate Power of Engines.	Expenditure on New Works.	Quantity Raised.	Quantity Sold.	Value of Quantity sold at the Mine.	Total Quantity		Value of Quantity sold.	Sales compared with previous Years.		Destination of Product.		
		Mines.	Men.	Horses.	Engines						Raised.	Sold.		Increase.	Decrease.	Nova Scotia & Cape Breton.	Adjacent Provinces.	Other Countries.
						H.P.	$	Tons.	Tons.	$	Tons.	Tons.	$	Tons.	Tons.	Tons.	Tons.	Tons.
Cumberland....	1869	4	57	13	3	41	4474 21	15066	8515	16163					1585	1979	5139	1397
	1870	4	65	13	3	41	2194 21	9053	7884	14790					931	1137	5801	446
	1871	4	118	14	3	41	9609 25	12382	11737	22742	36451	28136	53695	4153		1655	9757	290
Pictou.....	1869	7	881	81	30	1535	71464 29	218673	198212	373498				53360		29810	60093	84026
	1870	8	1044	76	29	1520	67784 47	248880	226525	417992				28313		47364	86802	92178
	1871	6	937	80	29	1520	37991 84	285994	245800	456301	753547	670537	1247791	19275		67147	82473	97162
Cape Breton...	1869	17	1446	210	30	1274	45949 79	343399	304320	591346				7575		83171	74089	157064
	1870	12	1480	197	36	1437	95713 60	367373	333578	639676				29259		81372	79873	158526
	1871	15	1448	192	35	1417	122767 60	370948	338431	659428	1081720	976329	1890450	4854		81795	68160	82904
Inverness and Victoria.....	1869	2	39	3	1	7	13582 80	895	749	1409					1176	498	262	....
	1870	2	11	2	1	7	24374 00	463	290	575					461	286	.....	....
	1871	2	16	2	2	27	5415 00	4018	450	894	5376	1489	2878	160		63	387	....
Annual Average..	.....	28	2514	294	67	2956	167,107 02	625,698	558,830	1,064,938	....	.....	....	..... .	.....	182,092	157,612	222,998

Other Minerals in Nova Scotia.— Apart from coal and gold, the only other minerals which have been made available in Nova Scotia during the last three years, as for many previous years, are iron and gypsum; the former chiefly at the Intercolonial Iron and Steel Company's Works (formerly called the Acadia Iron Works), near Londonderry, in the County of Colchester, and the latter at and in the neighborhood of Windsor, in Hants County, where gypsum has been quarried for a century. The returns for both products are very imperfect. From the most reliable information we can obtain, the annual production of the Intercolonial Iron and Steel Company is about 3000 tons of ore of about 50 per cent. produce, which is manufactured into pig and bar iron, car wheels, cast and spring steel, of the aggregate value of $120,000, of which about two-thirds are consumed in Canada, one-sixth exported to England, and one-sixth to the United States. The average number of men employed is 300; horses 12; horse-power of engines, 200.

The returns relative to gypsum, which is a most important article of export, are more imperfect. From the best information we can obtain, we may state that from the port of Windsor alone, at least 125,000 tons of raw gypsum are annually exported, being the produce of 15 or 16 quarries, and amounting in value at the port of shipment to about $100,000. Only about one-twenty-fifth is used in Canada, the remainder being exported to the United States. The number of men annually employed in this branch of mining industry may be estimated at 200.

TABLE IV.—PROVINCE OF NOVA SCOTIA.

GOLD.

CONDENSED and compiled from the Reports of the Chief Commissioner of Mines for Nova Scotia.

DISTRICT.	Year.	Number of			Quartz Crushed.	AVERAGE		Total Yield of Gold.	Total Value.	Yield compared with that of previous year.	
		Mines.	Men.	Mills.		Yield ℔ Ton	Val. ℔ Man			Increase.	Decrease.
					Tons. cwts.	oz. dwts. grs.	$ c.	oz. dwts. grs.	$ c.	oz. dwts. grs.	oz. dwts. grs.
SHERBROOKE	1869	17	134	11	11500 11	9 15	765 76	5546 11 16	102611 78	.....	1523 8 13
	1870	13	157	11	11428 06	12 12	840 65	7134 4 0	131982 70	1587 12 8	.....
	1871	14	171	12	14382 15	9 3	711 87	6579 19 7	121729 33	.....	554 4 17
RENFREW	1869	10	112	5	7258 09	8 13	511 68	3097 15 7	57308 63	.....	275 19 2
	1870	9	86	5	3243 15	7 5	602 24	1171 18 11	21680 56	.....	1925 16 20
	1871	6	36	5	2463 10	9 14	606 33	1179 17 16	21827 83	7 19 5	.....
WAVERLEY	1869	6	54	4	3915 15	8 3	545 31	1591 14 10	29446 82	.....	795 14 12
	1870	3	42	4	2616 00	6 5	357 31	811 3 21	15007 07	.....	780 10 13
	1871	3	56	4	2742 10	10 10	471 72	1427 18 12	26416 61	616 14 15	.....
WINE HARBOUR	1869	4	65	5	2726 12	5 7	204 76	719 8 19	13309 62	.....	528 17 8
	1870	2	26	5	2356 15	7 18	650 90	914 15 14	16923 41	195 6 19	.....
	1871	3	36	5	2927 00	10 12	790 53	1538 6 16	28459 16	623 11 2	.....
TANGIER	1869	3	51	4	1332 02	17 21	432 45	1192 3 10	22055 15	270 15 1	.....
	1870	3	94	4	2732 10	13 7	357 03	1814 2 10	33561 22	621 19 0	.....
	1871	5	88	4	2924 00	14 7	440 01	2093 0 7	38720 76	278 17 21	.....
UNIACKE	1869	14	71	6	3171 13	11 18	486 52	1367 3 12	34542 72	.....	1380 0 5
	1870	3	20	6	1794 10	6 7	524 21	566 14 5	10484 14	.....	1300 9 7
	1871	3	14	4	900 00	8 0	476 84	360 17 3	6675 84	.....	205 17 2
MONTAGUE	1869	3	29	2	572 07	1 8 4	513 97	805 13 14	14905 06	220 18 16	.....
	1870	3	48	2	956 08	4 0 3	1476 71	3831 9 6	70882 05	3025 15 16	.....
	1871	3	51	2	848 15	3 9 9	1143 53	3152 8 15	58319 97	.....	679 0 15
OLDHAM	1869	9	56	5	1735 02	16 2	460 78	1394 16 0	25803 80	675 15 20	.....
	1870	13	65	3	2644 02	15 12	583 96	2051 15 3	37957 49	656 19 3	.....
	1871	12	43	3	1374 00	1 5 0	739 41	1718 12 12	31794 56	.....	333 2 15
STORMONT	1869	4	19	2	784 02	5 19	221 05	227 0 13	4200 00	.....	446 2 4
	1870	5	21	3	1525 10	7 14	509 44	578 5 15	10698 20	351 5 2	.....
	1871	5	18	3	1937 09	5 19	575 44	559 17 21	10358 02	.....	18 7 18
LAWRENCETOWN	1869	2	20	2	223 00	2 17	27 79	30 0 20	555 76	.....	242 1 12
MUSQUODOBOIT, or CARIBOO	1869	2	36	2	1582 17	12 15	514 43	1001 0 23	18519 37	.....	.....
	1870	2	21	2	755 00	16 6	540 51	613 11 2	11350 75	.....	387 9 21
	1871	2	10	2	479 13	1 1 1	933 88	504 15 23	9338 75	.....	108 15 3
UNPROCLAIMED and other DISTRICTS	1869	7	29	6	622 09	12 16	251 72	394 11 19	7299 89	350 7 5	.....
	1870	3	25	3	812 17	9 7	279 93	378 5 15	6998 20	.....	16 6 4
	1871	1	9	9	281 00	7 23	230 49	112 2 16	2074 46	.....	266 2 23
Annual Average	.....	66	588	53	32,517 01	.....	.....	18,987 7 18	$351,266 56	.....	.....

In addition to the above return of gold extracted chiefly from quartz, an amount of 366 oz. 7 dwts. 9 grs, of alluvial gold is reported as having been obtained during the three years specified. The annual production of alluvial gold has, therefore, been only 122 oz., 2 dwts., 11 grs., or $2259.25. The value of the gold is taken at $18.50 per ounce, as in the Official Reports.

TABLE V.—PROVINCE OF NEW BRUNSWICK.

Description of Mineral Product.	Designation of Property or Company.	LOCALITY.		Year.	No. of		Value of Plant and Machinery.	Quantity produced.	Value of Product at the Mine.	Destination of Product.			Remarks.
		District.	County.		Men.	Horses.				Canada	United States.	Great Britain.	
							$		$				
COPPER ORE.....	Adams Island Mine....	Adams Island..	Charlotte	1869	30	1	6000	170 tons	11700	.....	.....	All	Work was suspended in 1869.
	Alma Copper Mine.....	Salmon River..	Albert	1870	4	1	1000	50 "	2000	.....			do do do 1870.
MANGANESE.	Markhamville Manganese Mining Company.	Markhamville..	Kings.....	1869	26	7	2000	300 "	11700	.....			The return for 1870 is the only one obtained, but the works are supposed to have been in operation for three yrs. with little change.
				1870	26	7	2000	300 "	11700	.....			
				1871	26	7	2000	300 "	11700	.....			
ANTIMONY ORE.....	Prince William Mines..	Prince William.	York.....	1869	12	3	*6000	185 "	2000	.....			Suspended since 1869.
PLUMBAGO..	Split Rock Mine	Portland	St. John	1869	10	2	700	6000 brls	12000				Irregularly worked; now suspended.
COAL.....	Grand Lake Mines.....	Grand Lake....	Queens	3 Yrs.	12	8	1000	22050 tons	26600	All	.....	.....	Partially worked, with little change.
ALBERTITE..	Albert Mines	Near Hillsboro'	Albert.....	"	12	4	*30000	19267 "	192670	.....	Chiefly	.....	Total from 1852 to 1872, 210,874 tons.
SALT	Sussex Salt Works.....	Sussexvale	Kings	"	2	2	*1000	4500 bus	3618	All	.....	.....	Regularly worked, with little change.
		Annual Average.....		.....	108	28	47,700	.....	262288	.....	.....	.....	

There are important works near Hillsborough, in Albert County, for the manufacture of plaster from the gypsum which abounds in that neighborhood, but no detailed statements regarding them have been obtained.

TABLE VI.—BRITISH COLUMBIA.

Description of Mineral Product.	Designation of Company, &c.	Year.	Number of				Value of Plant and Machinery	Quantity Produced.	Value of Products.	REMARKS.
			Men.	Horses.	Engines No.	Engines H. P.				
							$		$	
Gold.....	Return of Gold Mining generally throughout the Province.....	1869	*2,000	....	....	....	.....	.....	1,324,871	† Wells, Fargo & Co.'s Returns.
		1870	2,000	....	....	....	.....	.....	1,333,745	Hon H.L. Langevin, C.B., Minister Pub. Works.
		1871	2,000	....	....	....	.....	.....	1,349,581	Wells, Fargo & Co.'s Returns.
Coal.....	Vancouver Coal Mining and Land Company (Limited.)	1869	....	....	....	....	.....	35,802 tons	147,504	Sales in the last ten years, 300,000 tons.
		1870	....	....	....	....	.....	29,843 "	122,953	There is one other Coal Company in the Province, from which no returns.
		1871	194	5	10	222	94,000	45,000 "	185,400	
	Annual Average.....	.....	2,194	5	10	222	.....	36,882 coal	1,488,014	† Probably one-fourth more gold is taken away by private hands.

The coal produced by the Vancouver Coal Mining Company at Nanaimo and Newcastle Island is supplied to the Town of Victoria, and to Steamers calling at the place on their way to San Francisco in California, Portland in Oregon, and Honolulu, in the Sandwich Islands.

TABLE VII.—NEWFOUNDLAND.

The geological structure and economic interests of this Island are so closely allied with those of the Dominion, that it has been deemed desirable to include in this Report the record of its most important mineral products. Although various other minerals of economic importance, such as coal, galena, gypsum, &c., are known to exist in the Island, the Copper Mines of Tilt Cove are the only ones now systematically worked.

Description of Mineral Product.	Designation of Property.	LOCALITY.	Year.	Number of				Value of Plant and Machinery.	Quantity of Copper Ore produced.	Value of Copper Ore at the Mine.	Quantity of Nickel Ore produced.	Value of Nickel Ore.	REMARKS.
				Men.	Horses.	Engines							
						No.	H. P.						
								$	Tons.	$	Tons.	$	
COPPER AND NICKEL.	Union Mine	Tilt Cove, Notre Dame Bay	1869	288	1	1	35	80,000	45,091	448,242	37	11,964	All shipped to Swansea, Wales.
	Do.	Do. Do.	1870	288	1	1	35	80,000	4,000	120,000	135	26,600	
	Do.	Do. Do.	1871	140	2	1	35	80,000	3,000	90,000	20	4,300	
		Annual Average.....	.....	239	1	1	35	80,000	17,364	219,414	64	14,288	

TABLE VIII.

GENERAL SUMMARY of Mining Statistics for the Dominion of Canada and British Provinces.—Average of the years 1869, 1870 and 1871.

NAME OF PROVINCE.	Number of				Value of Plant and Machinery.	Value of Product at Mine.	REMARKS.
	Men.	Horses.	Engines	H. P.			
					$	$	
ONTARIO.....	6495	820	423	6734	2270816	966982	
QUEBEC.....	1264	93	17	550	376400	330209	
NOVA SCOTIA.....COAL.....	2514	294	67	2956	167107	1192365	Expenditure on new works only included.
Do. .....GOLD.....	588	....	53	*1000	.....	351266	Total in ten years from 1862, 196,776 oz. 1 dwt. 17 grs.
Do. .....OTHER MINERALS.....	500	25	6	200	.....	220000	
NEW BRUNSWICK.....	108	28	....	....	47700	262288	
NEWFOUNDLAND.....	239	1	1	35	80000	233702	
BRITISH COLUMBIA.....GOLD.....	2000	....	....	....	.....	1336066	Total in six years, beginning 1866, $1,274,746.
Do. Do. .....COAL..... ..	194	5	10	222	94000	151952	Total sales in ten years, 300,000 tons.
Grand Total, Annual Average.....	13,902	1,266	577	11,697	3,036,023	5,044,830	

Some of the above figures are probably too low, as it has been impossible in many cases to obtain complete returns.

THE GEOLOGICAL SURVEY, in Account with the Dominion of Canada, for the year ended 30th June, 1871.

	DR.	$ cts.	$ cts.
1870.			
July 1.	To Balance		1,640 61
	Amount received from Dawson Bros., on account sales of Survey Publications	133 35	
	do Alex. Murray, expenses of boxes sent to Newfoundland	6 43	
	do charged in account rendered 30th June, 1870, for advances to explorers, but included in expenditure of present year	2,180 04	
			2,319 82
	Warrants issued during the year		36,400 00
	Cheques unpaid, 30th June, 1871		602 13
			40,962 56
1871.			
July 1.	To Balance from last year's account		1,488 03
	CR.		
	By paid A. R. C. Selwyn, 12 months salary as Director, to 30th June, 1871.	3,000 00	
	T. Sterry Hunt, 12 do Chemist & Mineralogist, to 30th June, 1871	2,800 00	
	Elkanah Billings, 12 months salary as Curator and Palæontologist, to 30th June, 1871	1,600 00	
			7,400 00
	R. Barlow, 12 months salary	1,200 00	
	Scott Barlow, 12 do	945 83	
	H. S. Smith, 11 do	733 26	
	T. C. Weston, 12 do	716 62	
	do extra services	8 33	
	H. G. Vennor, 12 months salary	699 96	
	M. McFarren, 12 do	384 00	
	do petty disbursements of office	740 47	
	G. R. Grant, Book-keeper	550 00	
	G. A. Barlow, 12 months salary	120 00	
	J. Richardson, 12 do	1,200 00	
	R. Bell, 12 do	1,200 00	
	E. Hartley, 12 do	361 09	
	J. Lowe, 12 do	360 00	
	W. McOuat, 12 do	483 28	
	G. Browne, 12 do	416 65	
	Sundry persons mapping and preparing plans	1,062 44	
	Arrears of contingencies for 1869-70	1,843 47	
			13,025 40
	For provisions and other exploration expenses	6,156 61	
	Printing, advertising, stationery, engraving & lithographing	1,924 97	
	Maps	395 28	
	Translation	400 00	
	Carpenters, bricklayers, plumbers, and blacksmiths' work	375 00	
	Instruments, tools and repairs	281 55	
	Fuel, gas, water, and removing snow	561 86	
	Insurance, $178 15, freight and cartage, $32 75	210 90	
	Subscriptions to publications	55 90	
	Specimens and trays, $105 12, chemicals, $5 36	110 48	
	One-half disbursements of joint office with Sir W. E. Logan	163 20	
	Gratuity to estate of E. Hartley, 2 months salary	166 66	
	do H. S. Smith, do	133 33	
			10,935 74
	A. R. C. Selwyn, travelling expenses	901 63	
	T. S. Hunt, do	395 84	
	T. C. Weston, do	198 50	
	J. Lowe, do	161 72	
	S. Barlow, do	147 39	
	R. Barlow, do	114 58	
	Carried forward	1,919 66	31,361 14

GEOLOGICAL SURVEY, &c.—*Continued.*

CR.—*Continued.*	$ cts.	$ cts.
Brought forward	1,919 66	31,361 14
By paid Gordon Browne, travelling expenses.....	88 20	
E. Hartley, do	386 46	
L. W. Bailey, do	57 80	
E. Billings, do	3 62	
		2,455 74
Advances on account exploration expenses for year 1871-2, as follows :—		
To E. Billings	24 95	
L. W. Bailey, New Brunswick.....	200 00	
A. R. C. Selwyn, British Columbia	3,802 70	
J. Richardson, do	50 00	
A. Webster, Eastern Townships.....	110 00	
H. G. Vennor, Ontario	430 00	
W. McOuat, Lake Misstassini	200 00	
R. Bell, Nipigon	500 00	
S. Barlorw, Nova Scotia	250 00	
J. Lowe, Upper Rouge	90 00	
		5,657 65
Balance unexpended		1,488 03
		$40,962 56

JOHN SIMPSON,
Assistant Auditor.

RETURN.

(No. 32.)

To an ADDRESS of the HOUSE OF COMMONS, dated 22nd April, 1872:—For copies of all Reports made by Mr. Perley, C. E., on the most practicable and effectual means of securing and maintaining the unimpeded navigation of the River St. John, at or near the Oromocto Shoals (so called).

By command,

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 2nd May, 1872.

[In accordance with the recommendation of the Joint Committee on Printing, the above Return is not printed.]

PROGRESS REPORT

ON THE

CANADIAN PACIFIC RAILWAY

EXPLORATORY SURVEY.

ADDRESSED TO THE HON. H. L. LANGEVIN, C. B., MINISTER OF PUBLIC WORKS.

BY SANDFORD FLEMING,

ENGINEER-IN-CHIEF.

OTTAWA:

PRINTED BY I. B. TAYLOR, 29, 31 AND 33 RIDEAU STREET.

1872.

PROGRESS REPORT

OF THE

CANADIAN PACIFIC RAILWAY

EXPLORATORY SURVEY.

CANADIAN PACIFIC RAILWAY,
OFFICE OF THE ENGINEER IN CHIEF
OTTAWA, 10th Apri., 1872

SIR,—I have the honor to submit the following preliminary Report on the Canadian Pacific Railway Exploratory Survey, commenced in June, last year.

According to the terms upon which British Columbia entered the Dominion of Canada, it became necessary to construct a railway through to the Pacific coast, from some point which would form a junction with the existing railway system in the Provinces of Ontario and Quebec.

The first important step towards the construction of the railway being to ascertain, by instrumental and other examination, where a practicable and eligible line could be found, a survey became necessary.

The Parliament, at the last Session, made a grant of money towards the survey, and the Government subsequently appointed the undersigned to conduct it, and to carry into execution such steps as might be considered best, in order to discover the most practicable line for the proposed railway, and obtain information respecting its general engineering features.

It was deemed important to take such prompt and energetic action as would secure as much information on the subject as possible, before the next meeting of Parliament.

The object of this report is to give a brief outline of the steps which have been taken to accomplish the desired objects, and likewise to present, in a concise form, the general results of the survey up to the present time.

A point near the River Ottawa, opposite Lake Nipissing, was selected as the eastern end of the survey, this point, named "Mattawa," is common to and easily connected with the railways built and projected in Ontario and Quebec.

The terminus on the Pacific coast is still an open question; its selection will probably be governed, to a considerable extent, by the comparative facilities for railway construction presented by various projected routes through British Columbia.

At the outset of the enquiry all such information regarding the country extending from Mattawa to the Pacific coast, as it was possible to obtain, was carefully considered, in order to discover where the surveys should be made with the greatest hope of success.

It was found that the general direction of the railway line would be governed, by certain important physical features at various points through the country to be traversed.

Prominently among these may be mentioned; 1st, the very rugged country along the shores of, and for some distance back of Lakes Huron and Superior; 2nd, Lake Nepigon; 3rd, Lake of the Woods; 4th, Lake Manitoba; 5th, the Rocky Mountains, and lastly the Gold, Selkirk and Cascade ranges of mountains in British Columbia.

The leading features of the country naturally divide the survey into three great divisions:—

First.—From Mattawa to Fort Garry.
Second.—From Fort Garry to the Rocky Mountains.
Third.—From the Rocky Mountains to the Pacific Coast.
It will be convenient to refer to the subject under these separate heads:—

MATTAWA TO FORT GARRY.

Very little information could be obtained respecting a great extent of the country between Mattawa and Fort Garry. It had scarcely been penetrated more than a few miles back of the River Ottawa, and the Lakes Huron and Superior, except on the canoe routes which lead to the outlying posts of the Hudson Bay Company. Along the chain of lakes extending from Fort William to Manitoba, however, its character was better understood.

What was really known of this country, particularly that long stretch between the Ottawa and the northern bend of Lake Superior, indicated that it was not favourable for railway construction. Along the coast of Lake Superior the ground was reported most impracticable and forbidding.

It was deemed advisable therefore in projecting a chain of surveys, to make the attempt of piercing through the interior at a considerable distance back from the Lake, in the hope of finding ground free from those serious obstacles which presented themselves on or near the coast.

It was at the same time considered important to make the attempt of finding a practicable line which would touch the navigable waters of Lake Superior at the nearest point to Fort Garry, viz:—At Nepigon or Thunder Bay.

The whole distance from Mattawa to Fort Garry was sub-divided into eleven different surveys or divisions, each from 75 to 90 miles in length, with the view of securing a continuous chain of instrumental measurements, with as little delay as possible.

The whole country along the line of projected surveys, embracing an extent of not far short of one thousand miles, being densely wooded and without a road or trail of any description, made the prosecution of the work unusually difficult.

A branch survey was authorised from the Nipissing district to Sault Ste. Marie, to connect with lines projected south of Lake Superior, and with steamboat navigation to Nepigon or Thunder Bay.

To obtain as much information as possible within the year, an expedition was also sent northerly to James' Bay.

The last named expedition ascended to the head waters of the River Ottawa, and northerly by the river Abbitibbe to Moose Factory, returning by Moose River and Michipicoten River to Lake Superior.

FORT GARRY TO THE ROCKY MOUNTAINS.

The country west of Fort Garry, consisting for the most part of open prairies, and being characterized, even up to the base of the Rocky Mountains, by physical and engineering features, remarkable for their simplicity; a continuous instrumental survey was not for the present deemed necessary.

A careful examination of all the information obtainable, showed, however, that as a general rule the rivers of the plains west of Fort Garry flow in deeply eroded beds of great width, suggestive of bridging on a gigantic scale.

It was found, chiefly from the reports of the Palliser expedition, that the great troughs or valleys through which the streams flow, range over a wide extent of country, from 150 to

300 feet and even 400 feet in depth under the level plateau on each side; these great river troughs are at the same time reported, not unfrequently, to be about a mile and a mile and three quarters in width.

It appeared, therefore, of the utmost importance to examine further into this subject with the view of finding a route for the railway through the central plains as direct as possible, avoiding, as far as practible, the obstacles referred to, or overcoming them at the least difficult points.

A double expedition was organized to proceed by different routes, between Fort Garry and the two most eligible passes through the Rocky Mountains, viz : The Howse Pass and the Yellow Head Pass.

The instructions given this expedition were such as to elicit the desired information.

THE ROCKY MOUNTAINS TO THE PACIFIC.

It appeared from all the information that could be gathered from different sources that, of all the passes through the Rocky Mountains, those named the Howse and the Yellow Head Passes would prove most eligible for the railway.

Within the Province of British Columbia other most serious obstacles to railway construction in any desired direction presented themselves, and the selection not only of one of these passes, but also of a terminal point on the Pacific coast, seemed to depend on the success which might attend any attempt to discover the most practicable line for a railway across the interior of the Province.

The survey in British Columbia was divided into districts, one between Howse Pass and Shuswap Lake, a second between Shuswap Lake and the Straits of Georgia by the Lower Fraser River, a third between Yellow Head Pass and the Upper Fraser River through the Cariboo country.

Engineers were appointed to conduct the surveys in each of these districts, and six surveying parties were organized, with the view of thoroughly exploring the country, and gaining information which would lead to the selection of the most eligible line for the railway.

GENERAL ORGANIZATION OF STAFF.

In a work of such magnitude, beset with difficulties of no ordinary kind, and under circumstances which called for as much information as possible, with the least possible delay, it was important to organize the staff on a scale and in a manner calculated to secure satisfactory results.

The uninhabited, trackless and seemingly impenetrable nature of a great deal of the country to be explored, rendered it the more important that every means should be taken to prevent failure in obtaining the information sought for, or disaster to any of the parties engaged on the several branches of the survey.

A Commissariat Department was organized to attend to all matters connected with the procuring and transportation of supplies.

As far as it was possible or expedient, a uniform system was instituted for operations in the field, and for recording information obtained.

General and special instructions were drawn up for the guidance of every member of the staff.

To simplify correspondence, and lessen the chances of mistakes in connection with the Commissariat Department, and also for easy general reference, the several divisions of the Survey were designated by letters of the alphabet, and as reference will frequently be made to them in the detail Reports which accompany this, the following explanation is here presented :—

Division **B.** Extending from Mattawa to the confluence of the Montreal and Ottawa Rivers.

Division **C.** Extending from the Ottawa to a point near the head of the Montreal River.

Division **D.** From the Montreal River to a point about midway to the west branch of Moose River.

Division E. From the last named point to Moose River.
Division F. From Moose River to Small Black River, north of Lake Superior.
Division G. From Small Black River to Long Lake.
Division H. From Long Lake to Red Rock, at the mouth of Nepigon River.
Division I. From Red Rock to Lac des Iles.
Division K. From Lac des Iles to the canoe route to Lac Seul.
Division L. From Canoe Route to Lac Seul, to White Fish Bay, Lake of the Woods.
Division M. From White Fish Bay to Red River, near Fort Garry.
Division N. Expedition northerly by Rivers Ottawa, Abbitibbe, Michipicoten and Moose, to James' Bay.
Division O. } Expedition to examine the country west of Fort Garry to Kootanie
P. } Plain, near the Howse Pass, and Jaspar House, near the Yellow Head Pass.
Division Q. Between the North Thompson and Yellow Head Pass.
Division R. Between Cariboo and Tête Jaune Cache.
Division S. Between the Columbia River and Howse Pass.
Division T. The Eagle Pass between Shuswap Lake and the River Columbia.
Division U. Between Lytton, on Fraser River, and Shuswap Lake.
Division V. From Lytton southerly toward Burrard Inlet.
Division W. From Sault Ste. Marie, along the north shore of Lake Huron, to French River.

As rapidly as the various parties were organized and commissariat arrangements made, they began to move forward each to their respective field of operations.

The total number of engineers, surveyors, levellers and assistants employed, together with axemen, boatmen, packers, &c., would not be far short of eight hundred.

The first detachment left by the River Ottawa for the interior on the 10th of June. Those for the region north of Lake Superior left Collingwood on the 20th June. In British Columbia, a portion of the staff left Victoria for the Mountains on the 20th of July.*

PROGRESS OF THE SURVEY.

Some general observations respecting the progress made in the prosecution of the survey may be now submitted.

Full detail information may be had on reference to the reports and documents which accompany this.

It has been found impossible to maintain regular communication with many of the parties engaged on the survey during the winter, but judging from the Progress Reports last received, the undersigned feels confident in stating that the surveys projected in June last between Mattawa, on the Ottawa, and Nepigon Bay, on Lake Superior, are now, with one exception, completed, and that only two breaks in the survey exist between Nepigon Bay and Fort Garry.

No serious engineering difficulty has been met with in passing from the valley of the Ottawa to the country north of Lake Superior; it is impossible, however, to speak so favorably of the country covered by Divisions G. and H. of the survey, embracing over one hundred miles easterly from the River Nepigon. This section is excessively rough and mountainous, and the survey made through it did not result in finding a practicable line for the railway.

Although the attempt made last year to find a short line across the Cariboo country in the required direction, proved unsuccessful, all farther efforts have not been abandoned. The work of exploration has been carried on during the winter, and a diligent search will be continued wherever success is at all possible. Some hopes are entertained that a line may be found from the North Thompson across the Selkirk Range to the Quesnel Lakes and thence *viâ* Quesnel Mouth to Bute Inlet but should this fail, a careful examination will be made about fifty miles farther to the south on a line projected through by Horse

* The day on which British Columbia entered the Dominion.

Lake and Lake La Hache. Should all these explorations prove failures, it is confidently believed that it will be quite possible to reach Bute Inlet by a practicable line from Tête Jaune Cache, going round the Cariboo country on the north side along the banks of the Fraser River, and thence across the Chilcotin Plains. The only serious objection to the latter route will be its length. The gradients can scarcely fail to be favorable, on account of the line following the river for over 250 miles on a uniform and gradual descent.

Beside Burrard's Inlet and Esquimalt, other harbours accessible from the Pacific have been spoken of for the terminus. Of these may be mentioned Alberni, at the head of Barclay Sound, another harbor at Nootka Sound, Bentick Arm, also Port Essington, or some suitable point at the mouth of the Skeena River; it is somewhat premature, however, to discuss the merits of any of these points without further information respecting the means of reaching them from Tête Jaune Cache.

In concluding a summary of what has been accomplished since the survey was instituted in June last, it is greatly to be regretted that more definite information has not yet been received respecting the explorations now in progress east and west of Lake Nepigon, in the rear of the rugged belt along Lake Superior.

Assuming, however—and enough it is believed is known to warrant the assumption—that all difficulties in this quarter will be obviated, it may be claimed that the practicability and the general direction of the railway line from Ottawa to Fort Garry, thence across the great plains and the Rocky Mountains to Tête Jaune Cache has approximately been determined, and that from the last named point at least one line to the waters of the Pacific Ocean has been found practicable.

It will be interesting to compare some of the features of the line referred to in the last paragraph with the Union Pacific Railway in the United States, for this purpose a diagram accompanies this, showing thereon profiles of both.

From this diagram it will be seen that the Union Pacific Railway, extending from Omaha to San Francisco, runs, for 1,300 miles, or three-fourths of its entire length, at a higher level than the Yellow Head Pass, and that this point, the *great summit* of the Canadian Pacific Railway line, is less than half the elevation attained at several points on the line now being operated across the Continent.

A table giving the distances between some of the principal points in the country extending from the Ottawa Valley to the Pacific coast is appended hereto. It is not to be supposed that this table has any great pretensions to accuracy, except in the case of railways built or surveyed, in other cases the distances are simply ascertained by measurement on the maps of the country, and it is not at all certain that even the best maps are free from grave errors. Be this as it may, there are no means of checking the distances, until the chain of surveys are connected from end to end and the results known. It is believed, however, that even rough approximate distances may be useful to the Government in considering the question of the railway, and for this purpose they are presented.

One or two points brought out by the table of comparative distances are worthy of note.

Montreal and Toronto are the chief commercial centres in the Provinces of Quebec and Ontario, and it is important to ascertain how they can best be reached from the interior, say Fort Garry.

According to the Table, the distance between Montreal and Fort Garry by the line of the Canadian Pacific Railway, is 1,180 miles, while by railway projected through Sault Ste. Marie, Duluth and Pembina, the distance is 1,440 miles, and by way of Chicago and St. Paul, the distance is 1,843 miles—showing that by the three *all-rail* routes, made or projected between Fort Garry and Montreal, the Canadian Pacific line is 260 miles shorter than the line passing through Sault Ste. Marie, and 663 miles shorter than the route at present travelled *viâ* Chicago and St. Paul.

Taking Toronto as a starting point, and using the Northern or Nipissing Railways as far as Bracebridge, thence connecting them with the Canadian Pacific Railway at Mattawa, it appears from the Table that the total distance to Fort Garry, is 1,110 miles, while by way of Bracebridge, Sault Ste. Marie, Duluth and Pembina, the distance is 1,290

miles, and by way of Chicago and St. Paul, the distance is 1,507 miles, thus establishing the fact, that of the three *all-rail* routes, made or projected between Fort Garry and Toronto, the Canadian Pacific is 170 miles shorter than the route *viâ* Sault Ste. Marie and Duluth, and close on 400 miles less than the railway route *via* Chicago and St. Paul.

It will be further seen, that during the season of open navigation, the distance between Toronto and Fort Garry *viâ* Nepigon, is 1,074 against 1,274 miles *viâ* Duluth and that part of the Northern Pacific Railway east of Pembina—giving a saving of 200 miles in favour of the Canadian Pacific, and Branch to Nepigon, of which saving 40 miles is rail and 160 miles water.

Viewing the Canadian Pacific Railway as a "through" route between ports on the Atlantic and Pacific Oceans, the comparative profile referred to in a previous paragraph, and which accompanies this, illustrates the remarkable engineering advantages which it possesses over the Union Pacific Railway. The lower altitudes to be reached, and the more favorable gradients, are not, however, the only advantages.

A careful examination into the question of distances, shows, beyond dispute, that the continent can be spanned by a much shorter line on Canadian soil than by the existing railway through the United States.

Referring to the Table again, it will be seen that the distance from San Francisco to New York, by the Union Pacific Railway, is 3,363 miles, while from New Westminster to Montreal it is only 2,730, or 633 miles in favor of the Canadian route.

A closer examination of the Table will show that by the construction of the Canadian Pacific Railway, even New York, Boston and Portland, will be brought from 300 to 500 miles nearer the Pacific coast than they are at present.

A comparison of distance between distant points which may form traffic connections with the Inter-Oceanic Railways of North America, bring out some important facts referred to in the Table.

Compared with the Union Pacific Railway, the Canadian line will shorten the passage between Liverpool and China, in direct distance, more than one thousand miles.

When the decidedly better grades obtainable on the Canadian line are taken into consideration, with the saving in actual distance above referred to, it cannot be doubted that the Canadian Pacific Railway, in entering into competition for the through traffic between the two oceans, has the fairest possible prospects of success.

It has been found impossible to make any comparison with the Northern Pacific Railway, projected through the Territories of the United States to Puget Sound, as no reliable information could be obtained respecting distances, gradients, elevations, or probable route, except on that portion of the undertaking east of the Red River.

In concluding this Report it may not be out of place to remark that a survey of such magnitude through a country for the most part uninhabited and destitute of the means of shelter or subsistence could not be prosecuted without encountering risks and hardships to the individuals engaged.

The serious responsibility of keeping all the various parties properly supplied with at least common necessaries of food was fully appreciated from the beginning, and although supplies may, in isolated cases, have run short, no actual suffering from want has been reported.

It greatly grieves me to report the loss of seven poor men, who perished last summer through forest fires while engaged in carrying provisions to one of the surveying parties north of Lake Superior.

No other very serious disaster has occurred, although several narrow escapes have been met with. Since the winter set in several men have been badly frozen.

It is impossible to speak too highly of the courage and endurance displayed by members of the staff, more especially of those who, in order to carry out the wishes of the Government with as little delay as possible, did not hesitate, after the summer's campaign had terminated, to remain out on the exploration during the winter.

Some of these parties have been out for nearly ten consecutive months, embracing the whole of winter with all its severity. The service under the circumstances of country and climate could not fail to be a very severe one. It was impossible to supply them adequately with shelter or change of diet, in consequence of which several painful cases of scurvy have resulted.

All hardships and deprivations have, however, been braved and endured in a manner deserving of the highest commendation.

It is extremely gratifying to be able to report that, with very few exceptions, all the members of the staff, including those engaged in the Commissariat Branch, entered on their several duties with great zeal, and exerted themselves in every possible way to bring the work to a successful issue.

It is due to the officers of the Hudson Bay Company to state that wherever they were met with, they extended to the parties engaged on the survey much very acceptable kindness and assistance.

The Indians along the whole route proved remarkably friendly when the nature and objects of the several expeditions were explained to them. Many of them rendered valuable service in various ways, in connection with the work of exploration.

I have the honour to be, Sir,
Your obedient servant,
SANDFORD FLEMING,
Engineer-in-Chief.

Hon. H. L. Langevin, C. B.,
Minister of Public Works,
&c., &c., &c.

APPROXIMATE DISTANCES.

Canadian Pacific Railway, as projected on Plan.

(See explanation, pages 7 and 8 of Report.)

	Names of Places.	Intermediate distances.		Total Distances.
		Miles.	Miles.	Miles.
	Mattawa to junction of Nipigon branch	580	.....	
	Junction of Nipigon branch to Fort Garry	320	.....	
	Mattawa to Fort Garry	.....	900	
	Nipigon branch	120		
	Fort Garry to Jasper House	.....	1,000	
	Jasper House to Yellow Head Pass	40	.....	
	Yellow Head Pass to Tête Jaune Cache	60	.....	
	Jasper House to Téte Jaune Cache	.....	100	
	Mattawa to Tête Jaune Cache	.....	2,000	
	Téte Jaune Cache to New Westminster (Burrard Inlet) viâ Kamloops and line under Survey	.....	450	
1	*Mattawa to New Westminster*	.....	.....	2,450
	Mattawa to Tête Jaune Cache (as above)	.....	2,000	
	Tète Jaune Cache to Bute Inlet, viâ North Thompson and Lac la Hache	.....	450	
2	*Mattawa to Bute Inlet*	.....	.....	2,450
	Mattawa to Tête Jaune Cache (as above)	.....	2,000	
	Tête Jaune Cache to Bute Inlet, viâ North Fraser River and Forts George and Chilcotin	.....	450	
3	*Mattawa to ButeInlet*	.....	.....	2,450
	Mattawa to Bute Inlet (as above)	.....	2,450	
	Bute Inlet to Alberni Canal (Barclay Sound)	.....	150	
4	*Mattawa to Alberni Canal*	.....	.....	2,600
	Mattawa to Bute Inlet, (as above)	.....	2,450	
	Bute Inlet to Victoria (Esquimault Harbor)	.....	250	
5	*Mattawa to Victoria*	.....	.....	2,700
	Mattawa to Tête Jaune Cache (as above)	.....	2,000	
	Tête Jaune Cache to Port Essington, viâ North Fraser River	.....	500	
6	*Mattawa to Port Essington*	.....	.....	2,500

COMPARATIVE DISTANCES.

	Names of places between Montreal, Toronto and Fort Garry.	Rail or Water.	Intermediate Distance.	Total Distance.
			Miles.	Miles.
	Montreal to Mattawa	Rail	280	
	Mattawa to Fort Garry (Canadian Pacific)	do	900	
1	*Montreal to Fort Garry* (viâ MATTAWA)			1,180
	Montreal to Mattawa	do	280	
	Mattawa to Sault Ste. Marie	do	280	
	Sault Ste. Marie to Nipigon	Water.	260	
	Nipigon to Fort Garry (Canadian Pacific)	Rail.	440	
2	*Montreal to Fort Garry* (viâ MATTAWA, SAULT, and NIPIGON)			1,260
	Montreal to Mattawa	Rail.	280	
	Mattawa to Sault Ste. Marie	do	280	
	Sault Ste. Marie to Duluth	Rr. or W.	400	
	Duluth to Moorhead	Rail.	243	
	Moorhead to Fort Garry	do	237	
3	*Montreal to Fort Garry* (viâ MATTAWA, SAULT, DULUTH, and MOORHEAD			1,440
	Montreal to Chicago	Rail.	848	
	Chicago to St. Paul	do	491	
	St. Paul to Fort Garry	do	504	
4	*Montreal to Fort Garry* (viâ CHICAGO and ST. PAUL)			1,843
	Montreal to Toronto	Rail.	333	
	Toronto to Collingwood	do	94	
	Collingwood to Nipigon	Water.	540	
	Nipigon to Fort Garry (Canadian Pacific)	Rail.	440	
5	*Montreal to Fort Garry* (viâ TORONTO, COLLINGWOOD, and NIPIGON)			1,407
	Toronto to Bracebridge (viâ Northern and Toronto and Nipissing Railway)	Rail.	130	
	Bracebridge to Mattawa	do	80	
	Mattawa to Fort Garry (Canadian Pacific)	do	900	
6	*Toronto to Fort Garry* (viâ BRACEBRIDGE and MATTAWA)			1,110
	Toronto to Bracebridge	Rail.	130	
	Bracebridge to Sault Ste. Marie	do	280	
	Sault Ste. Maria to Nipigon	Water.	260	
	Nipigon to Fort Garry (Canadian Pacific)	Rail.	440	
7	*Toronto to Fort Garry* (viâ BRACEBRIDGE, SAULT, and NIPIGON)			1,110
	Toronto to Bracebridge	Rail.	130	
	Bracebridge to Sault Ste. Marie	do	280	
	Sault Ste. Marie to Duluth	R. or W.	400	
	Duluth to Moorhead	Rail.	243	
	Moorhead to Fort Garry	do	237	
8	*Toronto to FortGarry* viâ BRACEBRIDGE, SAULT, DULUTH, and MOORHEAD			1,290
	Toronto to Chicago	Rail.	512	
	Chicago to St. Paul	do	491	
	St. Paul to Breckenridge	do	217	
	Breckenridge to Fort Garry		287	
9	*Toronto to Fort Garry* (viâ CHICAGO and ST. PAUL)			1,507
	Toronto to Collingwood	Rail.	94	

COMPARATIVE DISTANCES.—*Continued.*

	Names of places between Montreal, Toronto and Fort Garry.	Rail or Water.	Intermediate Distances.	Total Distances.
			Miles.	Miles.
	Toronto to Fort Garry (viâ CHICAGO and ST. PAUL).—*Continued.*			
	Collingwood to Nipigon	Water.	540	
	Nipigon to Fort Garry (Canadian Pacific)	Rail.	440	
10	*Toronto to Fort Garry* (viâ COLLINGWOOD and NIPIGON, and Canadian Pacific)			1,074
	Toronto to Collingwood	Rail.	94	
	Collingwood to Duluth	Water.	700	
	Duluth to Moorhead	Rail.	243	
	Moorhead to Fort Garry	do	237	
11	*Toronto to Fort Garry* (viâ COLLINGWOOD, DULUTH, and MOORHEAD)			1,274
	Fort Garry to Duluth (Railway made or projected)		480	
	Fort Garry to Nipigon (Canadian Pacific, Main Line and Branch)		440	

NOTE.—Wherever Fort Garry is mentioned in the above distances, the Lower Fort Garry or Stone Fort is the place meant, this being found the most eligible point for crossing Red River.

COMPARATIVE DISTANCES.

	Descripton of Route between Atlantic and Pacific Ocean Ports.	Miles.
1	San Francisco to New York.—Union Pacific, Michigan Central and New York Central...	3,363
	New Westminster to Montreal.—Canadian Pacific, and Line to Montreal viâ Ottawa.....	2,730
	Difference in favor of Canadian Route.....	633
2	San Francisco to New York.—Union Pacific, Michigan Central and New York Central...	3,363
	New Westminster to New York.—Canadian Pacific, St. Lawrence and Ottawa, Ogdensburgh and Rome, and New York Central.....	3,058
	Difference in favor of Canadian Route.....	305
3	San Francisco to Montreal.—Union Pacific, Michigan Central, Grand Trunk Railway....	3,251
	New Westminster to Montreal.—Canadian Pacific, Montreal and Ottawa	2,730
	Difference in favor of Canadian Route.....	521
4	San Francisco to Boston.—Union Pacific, Michigan Central, New York Central, to Troy, Troy to Boston.....	3,422
	New Westminster to Boston.—Canadian Pacific, Ottawa to Montreal, Montreal to Boston	3,087
	Difference in favor of Canadian Route.....	335
5	San Francisco to Portland.—Union Pacific, Michigan Central, Grand Trunk Railway....	3,548
	Westminster to Portland.—Canadian Pacific, Ottawa and Montreal, Grand Trunk Railway	3,027
	Difference in favor of Canadian Route.....	521

NOTE.—The distance from Japan, China, or the Asiatic coast generally, to Liverpool, is from 1,000 to 1,200 miles less by the Canadian Pacific than by the Union Pacific Railway. In reference to this point, Professor Maury, U.S., writes :—"The trade-winds place Vancouver's Island on the way side of the road "from China and Japan to San Francisco so completely, that a trading vessel under canvas to the latter "place would take the same route as if she was bound for Vancouver's Island—so that all return cargoes "would naturally come there in order to save two or three weeks, besides risk and expense." It must, however, be clearly understood that this advantage, equivalent to the distance between Vancouver Island and San Francisco, viz., about 800 miles, is independent of and in addition to the saving of direct distance by the Canadian Route, given above.

LATITUDE AND LONGITUDE.

NEW YORK.....	Lat.	40°	—42′	—42″ N.
	Lon.	74	—00	—00 W.
MONTREAL.....	Lat.	45	—36	—17 N.
	Lon.	73	—58	—30 W.
SAN FRANCISCO.....	Lat.	37	—49	—12 N.
	Lon.	122	—30	—42 W.
NEW WESTMINSTER.....	Lat.	49	—13	—00 N.
	Lon.	122	—54	—30 W.

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 25th April, 1872; asking for copies.—1st. Of all instructions to, correspondence with, and reports of progress of the Engineers in charge of Divisions B. C. D. and E. of the Canadian Pacific Exploratory Survey. 2nd. Of any correspondence between the Minister of Public Works or the Chief Engineer of the Canadian Pacific Exploratory Survey, and any person engaged in any other capacity on the survey of either of the said divisions. 3rd. Of any report of investigation into the cause of the failure of Division C., of said survey; of minutes taken and papers submitted as evidence in the said investigation, and of all correspondence between the Minister of Public Works, the Chief Engineer, and the Engineer in charge, relating to the said investigation.

By Command.

J. C. AIKINS,

Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 12th June, 1872.

[In accordance with the Recommendation of the Joint Committee on Printing, the above Return is not printed.]

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 17th April, 1872;—For a Return of all Correspondence between the Government and the Windsor and Annapolis Railway Company, including any memorials or protests addressed to the Government by the Company, and of any agreements made between the Government and the Company relative to the use by the Company of the Government Railway between Windsor and Halifax, or their enjoyment of running power over the said Road.

By Command.

J. C. AIKINS,

Secretary of State

DEPARTMENT OF THE SECRETARY OF STATE,

OTTAWA, 6th May 1872.

DEPARTMENT OF PUBLIC WORKS,

OTTAWA, April , 1872.

SIR,—I have the honor to transmit herewith the Return in relation to the Windsor and Annapolis Railway Company, called for by an Address of the House of Commons, dated the 17th April, 1872, also herewith.

I have the honor to be, Sir,

Your obedient Servant,

F. BRAUN,

Secretary.

Honorable the Secretary of State

For Canada.

Ottawa.

WINDSOR AND ANNAPOLIS RAILWAY.

"Running powers" on the Nova Scotia Railway.

1871, March 1st, from *L. Carvell* and *G. Taylor* 2,404.—Give the history of the Windsor and Annapolis Railway from its inception, and report on that Railway's application for running powers on the Nova Scotia Railway, and are of opinion the granting of that application would prove detrimental to the interest of the Nova Scotia Railway.

March 13th, from *E. Parent*, 2,417.—Transfers a memorial from Vernon Smith, submitting to Council his application for "running powers" on the Nova Scotia Railway, which he claims under the agreement entered into for the construction of the Windsor and Annapolis Railway.

March 14th, *Report to Council*, 1,352.—To reject the application made by the Windsor and Annapolis Company for "running powers" on the Nova Scotia Railway.

April 17th, from *J. A. Mann*, 2,571.—Urges the claim of the Windsor and Annapolis Railway Company to obtain "running powers" into Halifax, failing which, he submits the Government should exercise the power of purchase conferred upon them by the Local Act of 1866. Solicits an interview with the Government.

April 19th, from *J. A. Mann*, 1,425.—Stating what action will be taken on his letter of 17th instant.

April 19th, from *J. A. Mann*, 2,583.—Acknowledging, Letter of 19th instant. Gives his address.

June 23rd, to the *Minister of Justice*, 1,549.—Referring, with other documents, the application of Mr. Mann on behalf of Windsor and Annapolis Railway for "running powers," &c., &c., into Halifax.

July 4th, from *H. Bernard*, 2,849.—Acknowledging, No. 1549, and states that the Minister of Justice has already fully reported on the Windsor and Annapolis Railway application for "running powers" into Halifax. The report referred to is in No. 2,417.

July 26th, from *J. A. Mann*, 2;895.—Submits, on behalf of the Windsor and Annapolis Railway Company, a printed Memorial, setting forth the grounds upon which the Company base their claim to "ruuning powers" into Halifax, and proposing certain arrangements, &c.

July 27th, from *J. A. Mann*, 2,901.—Has received a telegram informing him that the appeal upon the question of the liability of the Railway in the Company's favor, the judges deciding unanimously that the railway is a public provincial work, and as such exempt from taxation.

July 28th, *Report to Council*, 1,602½.—To make with the Windsor and Annapolis Railway the traffic arrangement, including "running powers" mentioned in their charter, and to have the matter adjusted by arbitration should the Minister and the Company be unable to settle it otherwise.

July 28th, *Order in Council*, 2,916.—Authorizing the Minister to make with the Windsor and Annapolis Railway Company the traffic arrangements, including "running powers" mentioned in the charter of Railway Company, and to appoint any officer or arbitrator for that purpose, should the Minister and the Company be unable to make their traffic arrangements without arbitration.

August 1st, from *J. A. Mann*, 2,920.—Requests that the decision arrived at by the Government in regard to the Windsor and Annapolis Railway Companies' claim, may be reconsidered, and proposes certain arrangements.

August 8th, to *J. A. Mann*, 1,617—Informing him that Mr. Fleming has been appointed to confer with him to make preliminary arrangements, with a view of carrying out the Order in Council of 28th ultimo, authorizing certain traffic arrangements and "running powers" with his Company.

August 11th, to *Sandford Fleming*, 1,623.—Appointing him to confer with the Windsor and Annapolis Railway Company or its authorized Agent, and instructing him to report to this Department what understanding and agreement can be arrived at with

the Company, with regard to the traffic arrangements and "running powers" authorized by Order in Council of 28th ultimo. Papers are enclosed.

August 14th, from *J. A. Mann*, 2,946.—Acknowledging, Letter of 8th instant. Will be happy to meet Mr. Fleming to make preliminary arrangements as to "traffic" and "running powers," but regrets that the proposals made in the 7th paragraph of his letter of 1st instant are not to be entertained, and submits new propositions for the consideration of the Governments of the Dominion, Nova Scotia, and New Brunswick.

August 28th and 29th, from *Hon. Sir F. Hincks*, 2,965.—"Telegraph"—S. Fleming and Mann have agreed on "running powers" between Annapolis and Windsor Railway Company, to give Dominion one-third gross receipt. Would there be any chance of acting Minister recommending this at once, as Mann wants to leave? The promise of recommendation might answer without an Order in Council. It will be a pity to hang this up if it can be avoided.

August 30, to *Hon. Sir Francis Hincks*, 1,639.—"Telegraph"—Sir Geo. E. Cartier will recommend adoption of agreement as soon as Mr. Fleming's report is sent. Mr. Mann may leave.

Sept. 2, to *J. A. Mann*, 1,647½.—"Telegraph"—By Sir G. Cartier—That as soon as Mr. Fleming has reported, matter will be submitted to Council, and that Mr. Fleming has received instructions to confer with him.

September 4, to *J. A. Mann*, 1,648½.—"Telegraph"—By Sir G. Cartier—You are under misapprehension. Fleming's report must be submitted for approval by Council. Will leave this morning for Ottawa. Since your last visit to Ottawa all due diligence made in your Railway matter. Government not responsible for any delay.

September 7, from *J. A. Mann*, 2,990.—"Telegraph"—It appears that no one here has authority to arrange "running powers" with me. Pray instruct Fleming.

September 8, to *Sandford Fleming*, 1654.—"Telegraph"—As suggested in your "telegram" to Sir Francis Hincks, Taylor is instructed to come here.

September 7, from *J. A. Mann* to Sir George Cartier, 3,002.—"Telegram"—Your telegram received. Fleming posted his report last Tuesday. I venture to hope that you will not think it necessary to delay matter for the meeting of another Council.

September 10, from *J. A. Mann*, 3,011.—"Telegraph"—I meet with no attention here, but plenty of frivolous objections. The line must be closed unless the Company get their rights.

September 13, to *Sandford Fleming*, 1,656.—"Telegraph"—Your report concerning agreement with Mr. Mann not yet received.

September 14, from *S. Fleming*, 3,026.—"Telegraph"—My report was prepared a week ago. Fear some bungling with mail; however, Taylor has copy. He should reach Ottawa to-morrow. I am now going over Intercolonial. If Sir George wishes, will go direct to Ottawa, leaving Shediac by steamer to-morrow. Answer to Amherst to-night.

September 14, from *Hon. Jos. Howe*, 3,028.—"Telegraph"—No concessions should be made to Mann which are not well considered. Mistakes may lead to great embarassment here (Halifax.)

September 15, from *S. Fleming*, 3,030.—Reports on his conference with Mr. Mann, and submits the arrangements proposed to be made with the Windsor and Annapolis Railway Company, as regards "running powers." The agreement B. was modified and finally adopted, as herein, on the 21st September, by Messrs. Carvell and Fleming, for the Government, and by Mr. Mann, by the Railway Company.

September 15, to *J. A. Mann*, 1,667.—Enclosing for his information copy of appendix B. attached to Mr. Fleming's report No. 3,030, being the arrangement proposed to be made with the Company, in respect of "running powers."

September 18th, from *J. A. Mann*, 3,038.—Has examined the draft agreement prepared by Mr. Fleming in respect to the traffic arrangement proposed to be made with his Company, and requests that it may be modified in the manner herein shewn.

September 19th, to *S. Fleming*, 1,672.—Enclosing for his information and report, Nos. 3,006, 3,030, and 3,038.

September 19th, *Report to Council*, 1,673.—Submitting for approval the articles of agreement prepared by Mr. Fleming, with the concurrence of Mr. Carvell, in respect of the traffic arrangement including "running powers" to be made with the Windsor and Annapolis Railway Company.

September 21st, *J. A. Mann*, 3,044.—Refers to his letter of 18th instant, and requests that clauses 7 and 17 of the draft agreement for "running powers" be altered as herein shewn, and the amount to be paid by the Company to the Government be fixed by the Order in Council, at 30 per cent. of the gross earnings. Also, that the agreement be made for 21 years, and renewable.

September 14th and 21st, from *J. A. Mann*, 3,045.—Suggests the adoption of certain steps in order to expedite the settlement of the question of the traffic arrangements and "running powers."

September 6th and 21st, from *S. Fleming* to *Sir Francis Hincks*, 3,046.—"Telegraph"—Taylors' objections to several clauses have much force in them when examined. I have prepared an agreement embracing all contemplated by Order in Council; and essential points in Mann's agreement which should meet the case. I think you should have Taylor at Ottawa, as he is familiar with the whole subject. Will report by 1st mail.

September 21st and 22nd, from *W. H. Lee*, 3,047.—States that the report to Council submitting for approval the agreement in respect of "running powers" has been adopted.

September 22nd, to *J. A. Mann*, 1,674.—Informing him of the Order in Council passed this day sanctioning the articles of agreement mentioned above.

September 22nd, to *George Taylor*, 1,675.—"Telegraph"—Agreement concerning "running powers" is passed; therefore, you need not come.

October 2nd and 6th, from *J. A. Mann*, 3,074.—Request that the claims of his Company was enumerated in the 3rd paragraph of his letter of 1st August last may receive attention; is willing to have them adjusted by independent arbitrators.

October 13th, to *J. A. Mann*, 1,699.—Acknowledging, No. 3,074.

November 21st and December 7th, from *J. A. Mann*, 3,204.—Urges that instructions be given for giving effect to the agreement made with his Company.

December 7th, to the *Minister of Customs*, 1,751.—Submitting for consideration and report copies of documents out of No. 30 and 3,006.

December 7th, to the *Minister of Finance*, 1,752.—Submitting for consideration and report copies of documents out of Nos. 30 and 3,006.

December 7th, to the *Minister of Justice*, 1,753.—Submitting for consideration and report copies of documents out of Nos. 30 and 3,006.

December 11th, from *Sandford Fleming*, 3,217.—"Telegraph"—Pray suggest to the Minister that Taylor should have instructions at once about Annapolis Railway, which, I think, takes effect on the 1st January.

December 22nd, *Order in Council*, 3,226.—Approving and ratifying the agreement made between Messrs. Fleming and Carvell for the Government, and Mr. Mann for the Company, as regards "running powers," &c., &c., and it being understood that the payment of the one-third of the gross earnings be adhered to.

December 20th, to *J. A. Mann*, 1,766.—That Mr. Taylor has been furished with an copy of the agreement with request to give effect to it.

December 20th, to *George Taylor*, 1,767.—Enclosing copy of agreement, with request to give effect to it.

December 29th.—1872. January 5th.—from *Hon. S. L. Tilley*, 3,291.—Acknowledging, No. 1,751, and is of opinion that under clause 9 of the agreement between the Company and the Government of Nova Scotia, of 22nd November, 1866, the Company is entitled to a draw-back of all duties paid them on articles used on construction

or necessary for working line, but all such refunded duties should form a charge by the Dominion Government against the Government of Nova Scotia.

January 8th and 20th, from *Vernon Smith*, 3,341.—Submits that the 8th clause of the agreement with his Company should be altered, so that the Company could book passengers and freight between Halifax and the way stations on the Grand Trunk line, and get a share of the revenue arising therefrom.

January 22nd, to *George Taylor*, 1837.—"Telegraph"—Since the agreement with Windsor and Annapolis Railway and Government, trains from Halifax to Junction and Truro continue as before,—and is the local traffic, in passengers and freight, between Halifax and Windsor attended to, and has it the same facilities as before the agreement?

January 22nd and 23rd, from *George Taylor*, 3,350.—"Telegraph"—Since the agreement with Windsor and Annapolis Railway and Government, trains to Junction and to Truro run as before. The same number of trains carrying passengers are run by the Company. between Halifax and Windsor as heretofore, but cannot say whether the Company have sufficient plant to move the freight traffic.

January 28th, to *George Taylor*, 1,838.—"Telegraph"—Have Government trains stopped at the same number of stations as before agreement?

January 23rd and 24th, from *George Taylor*, 3,352.—"Telegraph"—Yes. Government trains stop at the same number of stations now as before the agreement. The same regulations as to stopping are pursued at present as has been observed for years.

February 6th, to *Vernon Smith*, 1,872.—Informing him that complaints are made that his Company is charging higher rates than those agreed upon, and requesting him to furnish explanations on the subject, and to send a copy of his Company's Supplementary Tariff.

March 6th and 11th, from *Vernon Smith*, 3,528.—Acknowledging, No. 1872, and gives the explanations called for in regard to the Tariff, of which a copy is herewith.

(No. 2404.)

OTTAWA, 1st March, 1871.

SIR,—Having reference to the instructions with which we have been charged in the matter of the Windsor and Annapolis Railway, we have the honor to state that by an Act of the General Assembly of the Province of Nova Scotia, 28 Vic. Cap. 13, provision was made for the construction of this line, and the "Chief Commissioner" was authorized to contract with reliable parties to build it.

On the 26th October, 1865, an agreement was made between the Chief Commissioner and Messrs. Edward Harris and J. J. V. Smith, on behalf of Messrs. George Knight and Co. of London, to construct the "Windsor and Annapolis Railway," upon certain conditions. The work was to be commenced before the first day of May then following, and to be fully completed and ready for traffic on the first day of May, 1868.

This agreement was subsequently confirmed by Mr. George Knight; but, as he failed to commence the work, the agreement was cancelled.

On the 22nd November, 1866, Messrs. Tupper, Henry and Ritchie, then in England, having been authorized by an "Order in Council" and acting on behalf of the Chief Commissioner of Railways, entered into an agreement with Messrs. Punchard, Barry and Clark, by which the latter were to construct the works which were to become their property, or that of a Company to be formed by them.

The works were to be commenced not later than 1st January, 1867, and to be fully completed and ready for traffic on or before 1st December, 1869.

Subsequently, on the 7th May, 1867, the "Windsor and Annapolis Railway Company," was duly chartered in pursuance of an Act of the Assembly of Nova Scotia, 30

Vic. Cap. 36, the agreement of 22nd November, 1866, having been made "part and parcel" of the Act.

The line was opened for traffic on the 18th December, 1869. "Traffic arrangements" having been made on the 13th of the same month by Mr. Vernon Smith, on behalf of the "Windsor and Annapolis Railway," and Mr. Lewis Carvell on the part of the "Nova Scotia Railway."

A copy of these traffic arrangements are herewith submitted.

Section II. of the agreements of 22nd November, 1866, provided "That prior to the "opening of the Railway, a traffic arrangement shall be made between the said parties for "the mutual use and employments of their respective lines of Railway, between Halifax "and Windsor and Windsor and Annapolis, including running powers, or for the joint "operation thereof, on equitable terms," to be settled in case of difference by two arbitrators who are authorized, if necessary, to chose an umpire.

This section appears to contain two propositions, one being that traffic arrangements, "including running powers" shall be made for the "mutual use and employment" on "equitable terms" of the respective Railways. The alternative being that "traffic arrangements" for the "joint operations" of these lines, on "equitable terms," may be made.

We submit that as the two lines had a separate management, one of two courses might have been pursued under the agreements.

The first is covered by the "traffic arrangements" already made under which the lines are "jointly operated," as the cars and trains of the respective lines pass freely from one road to the other without change and without breaking bulk.

By another plan, the lines would be mutually used and employed if the trains and engines belonging to either road were permitted to pass to or from their own stations or depots on the connecting line under "equitable" traffic arrangements" and the immediate direction of the manager of such line.

This course is sometimes pursued in populous countries where an extensive traffic exists and "running powers" are necessary.

In the absence of data from which to make reliable calculations, we are at present unable to state the terms which would be "equitable" under a "traffic arrangement" to include "running powers."

If "running powers" were sanctioned, the "Windsor and Annapolis Railway" would at the proper time, be in a position to compete successfully with the Government Railways for all through traffic to the manifest disadvantage of the latter, and even upon the assumption that the "equitable terms" would compensate the Government lines for loss of traffic, and that they would be in no worse position, financially, than if the privilege were withheld, the presence of strange engines and trains, manned by persons beyond the control of the Manager, would create a feeling of uncertainty, and might result in disaster which would be otherwise avoided.

We have the honor to be, Sir,

Your obedient Servants,

(Signed,) LEWIS CARVELL,
GEORGE TAYLOR.

To the Honorable
H. L. Langevin, C.B.,
Minister of Public Works, Ottawa.

It should be remembered that the portion of the Nova Scotia Railway, which lies between Windsor Junction and Richmond, will form a portion of the Main Trunk Line between Halifax and Quebec.

(Signed,) L.C.
G.T.

(No. 2,417.)

DEPARTMENT OF JUSTICE,
June 21st, 1871.

The undersigned has the honor to report, that the memorandum of the Minister of Public Works, of 14th March last, upon the application of Mr. Vernon Smith, Manager of the Windsor and Annapolis Railway Company, and the correspondence which has thereupon ensued, in effect submits the question, whether the traffic arrangements of 13th December, 1869, between Mr. Smith on behalf of that Company, and Mr. Carvell on behalf of the Nova Scotia Railways, and made under the articles of agreement of 22nd November, 1866, of the Nova Scotia Government and the contractors for building the road, Section Eleven was a permanent one, binding on all parties for all time, or whether it was, as alleged by Mr. Smith, merely provisional ; and if provisional merely, then in what position the Windsor and Annapolis Railway stands with regard to the Nova Scotia Railways, as regards traffic arrangements under Sect. 11 of the agreement ?

The undersigned is informed that the traffic arrangement of 13th December, 1869, was marked as being provisional. If this be so, or if without being so, it was in fact provisional and temporary, the undersigned is of opinion that an arrangement must be made as if the road had not been yet opened. This arrangement must be in the alternative ; either (1) for the mutual use and employment of their respective lines of Railway between Halifax and Windsor, and Windsor and Annapolis, including running powers, or (2) for the joint operations of the Railways. Whichever alternative be adopted, the traffic arrangement must be on equitable terms to be settled by arbitration, as specified in the Eleventh Section of the agreement.

(Signed), JOHN A. MACDONALD.

OTTAWA, March 8th, 1871.

SIR,—As I have already waited a month in attempting to get a decision from the Department of Public Works on the case within submitted, you will, I trust, not think it unreasonable if I venture to ask you to be good enough to lay before His Excellency the Governor General in Council, the accompanying memorial, with the least possible delay, in order to secure an early, and as I trust, a favorable answer.

I have the honor to be, Sir,
Your obedient servant,
(Signed), VERNON SMITH.

Honorable J. C. Aikens,
Secretary of State, Ottawa.

To His Excellency, the Right Honorable JOHN BARON LISGAR, of Lisgar and Bailieborough, in the County of Cavan, Ireland, in the Peerage of the United Kingdom of Great Britain and Ireland, K.G.C.B., &c., &c., Governor General of the Dominion of Canada in Council.

The Memorial of Vernon Smith, Agent of the Windsor and Annapolis Railway Company, humbly sheweth as follows :

MAY IT PLEASE YOUR EXCELLENCY :

I have the honor to lay before Your Excellency the following statement, to which I beg to bespeak immediate and favorable consideration :

On the 22nd of November, 1866, articles of agreement, for the construction of the above line, were entered into by Messrs. Wm. Henry Punchard and Edward Clark, of London, with the then Chief Railway Commissioner of Nova Scotia, by the direction and authority of the Governor in Council of that Province, under which the Railway was

built. This agreement was made a part of the Act of Incorporation, as appears by the Nova Scotia laws of 1867, Chapter 36, and may be read in full in the Appendix No. 15, to the Nova Scotia Assembly Journals of the same year. Section 11 of this agreement runs as follows: "And it is hereby mutually agreed that prior to the opening of the Railway, a "traffic arrangement shall be made between the said parties of the second part and the "Provincial Government, for the mutual use and enjoyment of their respective lines of "Railway between Halifax and Windsor, and Windsor and Annapolis, including running "powers, or for the joint operations thereof, on equitable terms, to be settled by two arbi- "trators, to be chosen by the said parties in the usual way, in case of difference; and in "case of failure of the said arbitrators to make an award, or to chose an umpire in the pre- "mises, it is further agreed that the said traffic arrangement shall be settled by such "third person, together with one or both of the said arbitrators, as the Board of Trade in "England shall, on the application of either of the parties hereto for that purpose, "appoint."

So indispensable was this clause deemed, that I do not hesitate to say, no agreement could have been made in England without it, nor could the money have been raised for building and operating the road without some such provision.

In the summer of 1868, prior to the opening of the road, I made a journey to Ottawa expressly for the purpose, if possible, of securing an arrangement for these running powers with the Board of Works. The then Minister of the Department, Hon. Wm. McDougall, postponed the matter by promising to examine this line in person, in order to ascertain what ought to be done by the Government. He accordingly visited portions of the line the following autumn, but again deferred entering into an arrangement, as there was no immediate necessity, the line being not then ready for traffic.

In August, 1869, before the Avon bridge was finished, a portion of the line between Grand Pre and Annapolis was opened in Your Excellency's presence, but the whole line was not finally opened to Windsor until the following December, a few days prior to which Lewis Carvell, Esq., then Superintendent of Nova Scotia Government Railways, called on me for the purpose of entering into traffic arrangements over the line between Halifax and Annapolis. I again for the third time, applied to the Superintendent to give the Company the running powers to which they were entitled under the agreement, but this, he said, was beyond the scope of his instructions, and could only be dealt with by the Department at Ottawa. Until this could be done, he proposed that a *provisional* agreement should be entered into between us for traffic arrangements, and as it was absolutely necessary to open the line before I could again go to Ottawa, I agreed to this, and we entered into a written agreement marked "Provisional agreement," under which the traffic has been conducted ever since.

It is indispensable to the efficient and economical working of the whole line that the Company should have the working powers secured to them by the agreement. They are prepared to deal in a liberal spirit with the Government, and trust that as a body of gentlemen who have expended their capital in developing the rich resources of the western counties of Nova Scotia, they will be met by the Government in a similar spirit; but they respectfully insist that they are entitled to these running powers by virtue of the agreement on the faith of which they expended their money. I am prepared on their behalf to enter at once into an arrangement satisfactory to Your Excellency and your Government, or failing that, to enter upon the choice of arbitrators.

In the working of the English railway system, it constantly becomes necessary, with a view to advantageous working, to give these running powers over neighbouring lines, and I doubt not the same system applied to the lines between Halifax and Annapolis would equally redound to the advantage of Government and Company.

If any doubts exist as to the facts I have stated, or the mode of carrying out these arrangements in England where this contract was made, I ask to be allowed an opportunity of establishing both by proof.

Finding that the Hon. Minister of Public Works hesitates to come to a conclusion on this subject so important to the interests of my principals, I feel that I may best

subserve their interests by appealing at once to Your Excellency and your Council for that justice to which an association of English capitalists who have laid out their money in good faith are, I humbly conceive, entitled.

May it therefore please Your Excellency in Council to take the foregoing case into your favorable consideration, and allow your memorialist the privilege of being heard by Counsel and proof, in vindication of their clear contract rights.

And, as in duty bound, &c.

(Signed,) VERNON SMITH,
General Manager and Agent, Windsor and Annapolis Railway Company.

OTTAWA, March 8th, 1871.

(No. 1,352).

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, November 14th, 1871.

Memorandum.

The undersigned has had under consideration the application of Vernon Smith, Esq., General Manager and Agent of the Windsor and Adnapolis Railway Company, claiming, in virtue of an agreement under date the 22nd of November, 1866, "running powers" over the Nova Scotia Railway, between Windsor and Halifax, and the petition from the same, praying Your Excellency to hear the petitioner by Counsel and proof in vindication of the Company's rights.

Section 11 of the agreement referred to, which forms "part and parcel" of the Act, 30th Victoria, cap. 36, of the Statutes of Nova Scotia, intituled: "An Act to incorporate the Windsor and Annapolis Railway Company," is as follows:—

"And it is hereby mutually agreed that prior to the opening of the railroad, a traffic arrangement shall be made between the said parties of the second part and the Provincial Government, for the mutual use and employment of their respective lines of railway between Halifax and Windsor, and Windsor and Annapolis, including "running powers," or for the joint operations thereof on equitable terms, to be settled by two arbitrators, to be chosen by the said parties in the usual way in case of difference; and in case of failure of the said arbitrators to make an award, or to choose an umpire in the premises, it is further agreed that the said traffic arrangement shall be settled by such third person, together with one or both of the said arbitrators, as the Board of Trade in England shall, on the application of either of the parties hereto for that purpose, appoint."

It will thus appear that this section provides that a traffic arrangement should be made between the Provincial Government and the Windsor and Annapolis Railway, prior to the opening of the latter, for the mutual use and employment of their respective lines between Annapolis and Halifax, including "running powers," or for the joint operations thereof on equitable terms.

On the 13th of December, 1869, traffic arrangements were made between Mr. Vernon Smith on behalf of the Windsor and Annapolis Railway, and Mr. Lewis Carvell, on behalf of the Dominion Government, under whose charge is the Nova Scotia Railway, by which the two lines are jointly operated; the cars and trains of the respective lines passing freely from one road to the other without change and without breaking bulk.

Messrs. Carvell and Taylor, the present Superintendents of Government Railways in Nova Scotia and New Brunswick, in their Report of the first of March, instant, submit, that under the existing traffic arrangements both railways are jointly operated, that they are not prepared, owing to the present want of data, to say what equitable terms would compensate for the loss that would be occasioned by granting "running powers" to the Windsor and Annapolis Railway; and that the presence of strange engines and trains, manned by persons not under control of the manager, would create a feeling of uncertainty and might result in disaster.

And they add, as will be seen by their annual report, that the traffic arrangements made on the 13th of December, 1869, and now existing, are the traffic arrangements which

under the above cited eleventh section of the articles of agreements of November the 22nd, 1866, constitute the second alternative open to the parties of the said agreement.

The undersigned therefore does not see that the Windsor and Annapolis Railway have cause of complaint under existing arrangements, which are similar to those in force on the American and on the Grand Trunk of Canada railways, and he recommends that the petition of the Windsor and Annapolis Railway be not entertained.

Respectfully submitted,

(Signed,) H. L. LANGEVIN,
Minister of Public Works.

(No. 2,571.)

OTTAWA, 17th April, 1871.

SIR,—Referring to the conversation which I had with you this morning on the subject of the Windsor and Annapolis Railway, I venture, in obedience to the suggestion made by you, to submit to you in writing the main points which I brought to your attention.

As you are aware, I occupy the position of Special Commissioner of the Windsor and Annapolis Railway Company, which Company, I may add, is composed of gentlemen of position, means and character, who desire nothing but what is fair and right.

The capitalists, through the Company, embarked their capital in the construction of the railway on the faith of the Acts of the then Local Legislature, which expressly enacted that it should be a Provincial Government Railway (Vide Clause 1, Act 1864, and Clause 3, Act 1865.) They reckoned therefore, and with good reason, on the Government influence and assistance, and most certainly never contemplated that the Government were to become competitors as the owners of rival lines of railway.

In these reasonable anticipations the Company have been disappointed; the Government have so far declined to allow the Company to exercise the running powers or the joint operations to Halifax, which were expressly conferred both by the concession and by the Local Acts, they have become the promoters and owners of a large competitive system of Railways to Canada, now to be extended to the Pacific, which must withdraw a considerable amount of traffic from off the Company's Railway; they have subsidized steamers from Halifax and Windsor to St. John's; they have appointed as their Acting Commissioner the Managing Director of another enterprize, whose interests cannot be regarded as parallel in all respects with those of the Company; and in short, the whole energies of the Government are now directed to a keen competition with, and the crushing out of the Company.

I submit with great respect that the Company have allowed themselves to be misled—the career they have before them if the Government refuse them redress is an unpleasant one. They have no alternative but to claim a free and equal use of the Government Railway into Halifax; they must put on a line of first class steamers between Annapolis and Boston; they must endeavor to amalgamate or to make arrangements with one or other of the Great American Railways,—such for instance as the New York Central or the Erie,—and with all this prefer a claim upon the Government for the loss which they have suffered and must still suffer from the opposition of the Government Lines.

This I need hardly add is not what the Company were led to expect, or what they desire. They believe that if they have their rights they have a good property; but rather than continue in a concern which must fight for every ton of traffic, and that to against so powerful an adversary as the Government they would prefer much that the Government should exercise the powers of purchase conferred upon them by Clauses 7, 8 and 10 of the Local Act of 1865, and they submit that upon every principal of equity, the Government are in honor bound to do so.

Having came out from England specially to make these representations to the Government, I venture to hope that I may be permitted to supplement these remarks by a *viva voce* explanation before the Council, and that I may obtain for my request a favorable consideration.

And I have the honor to be, Sir,
Your obedient Servant,
(Signed,) J. A. MANN.

The Honorable H. Langevin,
Minister of Public Works, Ottawa.

I would point out that while the advantage to accrue to the Company from any traffic withdrawn from the Government Line proper cannot exceed 85 miles, the injury to the Government may, in the case of traffic for Montreal, involve a loss of upwards of 600 miles, and for the Pacific of 3,200 miles.

(No. 1,425.)

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, April 19th, 1871.

SIR,—I am directed by the Minister of Public Works to acknowledge the receipt of your letter of the 17th instant, on the subject of the Windsor and Annapolis Railway, and to state that it has received his best consideration.

The question of purchase of the line cannot be taken up by a mere quorum of the Privy Council, but will be submitted to a full meeting of the Cabinet, as soon as possible. Should the Council decide upon purchasing, the matter will, of course, have to be laid before Parliament for approval; but should it not so decide, then the question of the "running powers" referred to in your late interview with the Minister and the members of a Sub-Committee of the Privy Council, will be submitted to the Honorable the Minister of Justice, for his opinion and advice.

I am further to assure you that the Minister will use his best endeavors to have the matter settled with as little delay as possible.

I have the honor to be, Sir,
Your obedient Servant,
(Signed,) F. BRAUN,
Secretary.

J. A. Mann, Esq.,
Special Commissioner of the
Windsor and Annapolis Railway, Nova Scotia.

(No. 2,583.)

THE RUSSELL HOUSE,
OTTAWA, 19th April, 1871.

SIR,—I am in receipt of a letter from Mr. Braun, of this day's date, informing me that you will submit the questions which I had the honor to lay before you, for the consideration of the Cabinet.

As I leave to-day for New York, *en route* for England, I venture to ask that you will be good enough to direct that the result may be communicated to me by letter, addressed to me at the office of the Windsor and Annapolis Railway Co., Westminster Chambers, Victoria Street, London.

I trust that the decision may be such as to render it unnecessary for me to return here, but I need not say that if necessary, I will endeavor to do so.

With great respect,
I am, Sir,
Your obedient servant,
(Signed,) J. A. MANN.

The Honorable H. Langevin, C. B.,
&c., &c., &c., Ottawa.

(No. 1,549.)

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, June 23rd, 1871.

SIR,—Having reference to the Windsor and Annapolis Railway Company's claim to be allowed "running powers" over the Nova Scotia Railway, and to the Report to Council by the Hon. the Minister of Public Works on that subject, dated the 14th of March, 1871, and referred for your opinion, I have now the honor to transmit you a further application made by Mr. Mann, Special Commissioner of the Company, proposing that the Government of Canada should purchase the Windsor and Annapolis Railway, in the event of the claim for "running powers" being refused.

I also transmit you the following papers on the subject, viz: Nos. 1,349, 1,403, 1,485, 1,553, 1,628, 2,053, 2,142, 2,360, and 2,571, with 2,404, 2,417.

I have the honor to be, Sir,
Your obedient servant,
(Signed), F. BRAUN,
Secretary.

The Honorable,
The Minister of Justice,
&c., &c., &c., Ottawa.

(No. 2,849.)

DEPARTMENT OF JUSTICE,
July 4, 1871.

SIR,—The Minister of Justice has had before him your letter of 23rd June last, in reference to the Windsor and Annapolis Railway.

But he is not aware with what object the documents herein referred to have been submitted to him, as he had the case previously before him, and fully reported thereon upon 21st June last, which report, I notice, is attached to No. 2,417 of your references, enclosed with your last letter.

I return the several documents submitted by you.

I am, Sir,
Your obedient servant,
H. BERNARD.

F. Braun. Esq., Secretary,
Department Public Works.

(No. 2,895.)

RUSSELL HOUSE,
OTTAWA, 26th July, 1871.

SIR,—I regret exceedingly that it has become necessary for me again to return to Ottawa to urge the claims of the Windsor and Annapolis Railway Company upon the Government.

The capitalists interested in the railway, among whom I may mention Sir John Lubboch (Robartes, Lubboch & Co., Bankers); A. Leonini (Italian Merchant); A. D. DePass (DePass & Vores, Shipowners); A. Ricarde (A. & W. Ricarde, Stock Brokers); and of the Stock Exchange Committee, London, J. Field (Stock Broker); J. Bravo (Bravo Bros. & Co., Bankers and Merchants), have however well considered the matter, and have determined that they cannot offer to continue to work the line under the present unsatisfactory arrangements with the Dominion Government, and they have empowered me to communicate that decision to the Government, and to make any arrangements that may be necessary in the matter.

In the few days since my arrival at Halifax, I have occupied myself by preparing a

Memorial to his Excellency the Governor General in Council, setting forth the grounds on which the claim is based; but hearing that you are likely to be absent from Ottawa for some time, and that a Cabinet Council will meet to-day, I deemed it better to come on here with a rough print of the Petition in its incomplete and unfinished state, and of which I now beg to enclose a copy.

I trust you will, under the circumstances, excuse my laying before you so rough a Memorial. From it, I doubt not, you will be able to glean the main points of the case; and as the subject is a very pressing and a very serious one, both to my friends and to the Provinces of Nova Scotia and New Brunswick, I venture to ask that it may be brought before the Council to-day, and that I may have their decision upon it. I need hardly say that I should be glad of the honor of an interview with the Council to enable me to offer any explanations which they or you may require.

And I have the honor to be, Sir,

Your obedient servant,

(Signed,) JAMES A. MANN.

To the Hon. H. Langevin,
Minister of Public Works, &c., &c., &c.:

THE MEMORIAL OF THE WINDSOR AND ANNAPOLIS RAILWAY COMPANY (LIMITED).

To His Excellency The Right Honorable LORD LISGAR, G.C.B., G.C.M.G., Governor General of Canada, &c., &c., In Council:

Humbly Sheweth:—

1. That your memorialists are a Company, composed for the most part, of capitalists resident in Great Britain, registered in England on the first of March, 1867, as a "Limited" Company, under an Act of the Imperial Parliament, entitled "The Companies' Act, 1862"; and incorporated by an Act of the Legislature of Nova Scotia (30 Vic., Cap 36) on the 7th of May, 1867. **Memorialist as Corporate Company.**

2. The object for which your memorialists were incorporated, was the construction and the working of a portion of one of the sections of the Government Railways of the Province of Nova Scotia, extending from Windsor to Annapolis, a distance of eighty-five miles, under an agreement made between the eminent contractors, Messrs. Punchard, Barry and Clark, of London, and the Government of the Province of Nova Scotia, on the 22nd of November, 1866. **Object of their incorporation.**

3. The capital embarked in the enterprize by your memorialists amounts to £300,000, represented by fifteen thousand shares of £20 each. **Capital invested by them.**

4. Your memorialists have, as provided for by their Articles of Association, also raised the further sum of £200,000, by the issue of terminable debentures, carrying interest at the rate of 6 per cent. per annum. **Debenture Debt incurred by them.**

5. Your memorialists, when they embarked their capital, had before them the Acts of the Legislature of the Province of Nova Scotia, having reference to the Railway, namely: of the Sessions of 1854, 1864 and 1865, together with the before-mentioned agreement of 22nd November, 1866; the main points of which bearing on your memorialists' case, they crave leave to quote:— **Documents on which they were induced to embark their capital**

The Act of 1854, 17 Vic., Cap. 1, Legislature of Nova Scotia, 31st of March, 1854.

"*Preamble.* *The construction* and maintenance *of a trunk line* of railway from the Harbour of Halifax to the frontier of New Brunswick, *with branch lines* extending to the Harbour *Pictou and to Victoria Beach (near Annapolis) will greatly facilitate the internal trade of Nova Scotia—will develope her resources—enlarge her Revenue, and open more frequent and easy communication with the neighbouring Provinces and States.*"

Section 1. "The lines of railway to be constructed under the provisions of this Act "shall be *Public Provincial Works.*"
Section 4. "The construction and management of such railways shall be under the "charge of six Commissioners."
Section 5. "The Commissioners shall build such railways by tender and contract."
Section 10. "The Commissioners or Contractors are authorized to enter upon and take "possession of any lands required for the track of the railways or for stations."
Section 16. "The Commissioners or Contractors may make an agreement in writing "with the proprietors of lands so taken for damages and fencing."
Section 17. "Where no agreement shall be made appraisers shall make a valuation as to "the damages to lands and fencing."
Section 18. "In making such arrangement or appraisement, the benefit likely to be "derived by the proprietor from the railway running through his land, shall be "taken into consideration, and the damages thereby reduced or extinguished."
Section 19. "The monies payable for such lands and fencing shall form a county "charge."
Section 20. "Whenever the railways or any portion of them shall be completed, it shall "be lawful for the Governor in Council to make such arraugements as may be suit- "able for working the railways as one line by a common management, or for working "the trunk line and branches by separate Commissioners."

Another Act of the same Session, 17 Vic., Cap. 2, Legislature of Nova Scotia 31st of March, 1864:—

Section 1. "It shall be lawful for the Governor, by and with the advice of the Executive "Council, to contract a loan, on the pledge of the revenue of this province, whether "arising from the duties upon imports, the sale of crown lands, the royalty paid "by miners, or the tolls to be collected on the railways constructed with the monies "to be borrowed under this Act."
Section 2. "Certificates of debt to be called Debentures bearing interest at six per cent. "may be isued from time to time, at par, or at such premium as the same may "command, as the Railways proceed."
Section 3. "The principal of such Debentures shall be paid in full, at the expiration of "twenty years from the date of their respective issues."
Section 4. "The whole of the revenues to arise from the receipts of tolls on such "railways shall, after the expense of working and maintenance have been paid, be "applied towards the payment of interest on the Debentures, and the surplus shall "form a reserve fund for the redemption of the loan.

The Revised Statutes of 1864, 27 Vic., Cap. 70, Legislature of Nova Scotia, 10th of May, 1864, included, among others, a chapter devoted wholly to the subject of Railways. In it the provisions of the Act of 1854, before referred to, were re-enacted.

The Act of 1865, 27 Vic., Cap. 13, Legislature of Nova Scotia, 2nd of May, 1865:

Section 1. "The Chief Commissioner of Railways, by direction and authority of the "Governor in Council, may contract for and on behalf of the Province, with any "responsible party or parties, for the *construction* of the following Sections of the "Provincial Railway, that is to say,—from Truro to the boundary line to New "Brunswick, and from Windsor to Annapolis; and for the payment of the subventions "on the terms and under the provisions and stipulations hereinafter set forth and "contained. The location of the lines of the said railways to be subject to the "approval of the Governor in Council."
Section 2. "*The Contractors* for the Section first mentioned (*i. e.* between Truro and "Amherst), *to receive a subvention*, of not more than 4 *per cent. per annum*, for twenty "years, on $40,000 *per mile* of the whole length of said section, *and the Provincial* "*Government, to take* on behalf of the Province, *stock* in the said undertaking, with "such contractors, *to the extent of* $400,000."

Section 3. "*The Contractor* or Contractors for the section last mentioned (viz.—between "Windsor and Annapolis) *to receive a subvention* of not more than 4 *per cent. per* "*annum*, for twenty years, *on* $24,000 *per mile* of the whole length of the said section, "with the exception of a bridge, viaduct, or other erection suitable for a railway "across the River Avon at or near Windsor, the latter to be built at the expense of "the Province."

Section 4. "*The first annual payment of such subventions to fall due*, and to be made, at "a period not less than twelve months after the bonâ fide *commencement to build* such "sections respectfully."

Section 5. *The Governor* in Council *may*, after such contracts or either of them are "entered into, by an Order in Council, *declare that the subventions* or either of them "shall *cease*, and at what time; *and, in lieu of such subventions* or either of them, "pay to the Contractor or Contractors *the amount or balance*, as the case may be, of "such subvention, or either of them, capitalized either in cash or Provincial "Debentures."

Section 6. The Governor in Council, as soon as a contract has been entered into for build- "ing the said section last mentioned from Windsor to Annapolis, may make pro- "vision, either by contract or otherwise, for the building of a suitable bridge, viaduct, "or other erection across the said Avon River, at or near Windsor aforesaid."

Section 7. "*The Governor in Council may at any time*, before or after the said sections "or either of them are or is completed, by an Order in Council, *assume*, on behalf of "the Province, *the ownership of the said section or either of them*, by paying to the "owners thereof of the value of the same, to be ascertained as hereinafter provided, "either in cash or Provincial Debentures, at the option of the Governor in Council."

Section 8. "The amount to be paid under the next preceding section shall be ascertained "by the decision of three arbitrators; one of whom to be appointed by the Governor "in Council, one by the owner or owners of the section, and one by the principal "Secretary of State for the Colonies."

Section 10. "The Governor, by and with the advice of the Executive Council, may, for "the purposes of this Act, contract a loan on the pledge of the revenues of this "Province, whether arising from the duties upon imports, the sale of crown lands, "the royalty paid upon minerals, or the tolls to be collected on the railways owned "by the Province."

Section 13. The provisions of chapter 70 of the Revised Statutes (1864) referring to Government Railways, were, with certain exceptions in cases where not bearing on the subject, made applicable to the railways to be built under this Act, the terms "*Commissioners*" and "*Railway Department*" therein used, were respectively to include the "*contractors or owners of these Railways*," and "*property belonging to* "*the contractors or owners of the said section of Railways*."

Section 14. "The Chief Engineer of Railways shall report to the Government on the "route or routes proposed, and during the construction of the said lines of railway "respectively, shall have power at any time, and at all times, to enter upon the same, "and examine the works; and it shall be his duty to report to the Government "from time to time, the state and condition of such works; and any failure in the "execution, or in carrying out any of the provisions of such contracts, and generally "to watch over the interests of the Province in reference thereto."

Section 15. "Contractors shall furnish names of claimants for damages, instead of Board "of Railway Commissioners, as mentioned in section 47 of said Chapter, and shall "do all Acts in said section provided to be done by the Board of Commissioners."

Section 16 "The moneys payable for lands for the sections hereinbefore mentioned shall "form a county charge."

Section 18. "The contracts to be made under this Act, shall contain stipulations and "provisions for the regulation of the tolls and rates for passengers and freight, the "carriage of mails, troops, munitions of war, and other Government property on the "said lines, and generally for guarding the interests of the Province."

THE AGREEMENT OF 22ND NOVEMBER, 1866, MADE WITH MESSRS. PUNCHARD BARRY AND CLARK.

Section 1. "Whereas, an Act of the Legislature of Nova Scotia was passed on or about "the second day of May, one thousand eight hundred and sixty five, entitled 'An "Act to provide for the construction of two other sections of Provincial Railway,' "and by such Act provisions were made for the construction of a certain railway "from Truro to the boundary line of New Brunswick, and of a certain other rail-"way from Windsor to Annapolis."

Section 2. "*And whereas*, in pursuance of the provisions of the said Act, *a negociation* "*has been entered into* between the said parties hereto, having for its object an "arrangement by which the said parties of the second part, or their assigns, shall "undertake the construction and (although not authorized by the Act) working of "the said section of the said railway from Windsor to Annapolis, *under the pro-*"*visions of the said Act*, subject to the terms and conditions hereinafter mentioned."

Section 3. "*The before recited* Act (namely, of 1865) *shall be the basis of the agreement*, "so far as it relates hereto, except so far as the same may by this agreement be "modified."

The Contractors, in consideration of the premises, and of the agreement hereinafter contained, agree to construct the said railway from, at, or near the present Windsor Station to Annapolis, or such variations thereof as may be agreed upon between the parties hereto. The said works to be diligently prosecuted, and fully completed, and ready for traffic on or before the first day of December, 1869. The rails to be of good quality, and to be not less than 42 lbs. weight per yard. The stations and depots to be not less than ten in number; and the said parties of the second part (*i.e.* contractors) to effectually manage and operate the said railway when completed, at the proper expenses, at such rates, tolls, and charges as hereinafter provided (see clause 8) for their own benefit, that is,—To carry Her Majesty's servants at two cents per mile, and their children, of from three to twelve years of age, at half price, and those under three, free; officers to carry one hundred weight of baggage, and privates half that quantity; excess baggage to be paid for at eighty cents per hundred weight per one hundred miles; also to carry Her Majesty's mails at a rate of charges to be agreed upon by the parties hereto, or by an umpire to be chosen by them in the usual way in case of difference, prior to the opening of the railway; and in case an umpire cannot be agreed upon, and such charges fixed by him, then such charges shall not exceed the rates charged for such service in the Province of Canada.

Section 5. "The contractors to erect and build over the Avon River, near Windsor, a "good and sufficient bridge."

Section 6. "The subvention, as sanctioned by the Legislature, shall be capitalized at the "agreed sum of £188,600 sterling, instead of the payment of the sum of sixteen "thousand three hundred and twenty pounds sterling, per annum, and the Pro-"vincial Bonds or Debentures for the above sum, issued in the ordinary form, "bearing six per cent. interest, shall be delivered at par, to the parties of the second "part, or their assigns or nominees; but such bonds shall only be delivered to the "said last mentioned parties, with the coupons attached, bearing interest from the pre-"ceding first of January, or first of July, as the case may be, prior to such delivery, "according to the amounts from time to time to be expended by them in the con-"struction of the said railway, or work, according to a scale of prices to be agreed "upon: the amount of such expenditure to be certified monthly by the Chief "Engineer, or his Resident Engineer of the parties of the second part (*i.e.* the con-"cessionaires), and concurred in by the Chief Railway Engineer of the Province, "or any other engineer to be appointed by the Governor of the Province, "and that such delivery to the said parties shall be within fourteen days from the "date of such certificate; but the amount of such bonds shall never exceed fifty per "cent. of the whole amount expended, according to the said monthly certificates, and

"the balance, if any, shall be paid when the railway is completed and opened up for "traffic."

Section 7. "All lands required for the railway track and appurtenances, shall be pro- "vided *gratis* as under the provisions of section 11, chapter 70 of the Revised "Statutes," (the said section 11 providing that the commissioners or contractors are "authorized to enter upon, and take possession of any lands required for the track of "the railways or for stations; and they shall lay off the same by metes and bounds, "and record a description and plan thereof in the Registry of Deeds for the County "in which the lands are situate, *and the same shall operate as a dedication to the* "*public of such lands:* the lands so taken shall not be less than four rods—*i.e.* 65½ "feet,—or more than six rods—i. e. 97 feet—in breadth, for the track, exclusive of "slopes of excavations, and of embankments, except where it may be deemed advisable "to alter the line or level of any public or private carriage road, or divert any stream "or river, in which case it shall be competent for the Commissioners to take any such "further quantity as may be found necessary for such purposes; also at each station "a sufficient extent for depot and other station purposes; provided always, that "excepting at the termini or junction of the railways, the quantity so appropriated "shall not exceed five acres.")

Section 8. "*The Contractors shall be entitled to make and enforce a tariff of charges* for "fares and freight (except as aforesaid,) *to be mutually agreed upon between the* "*parties*, prior to the completion of the said railway and opening the same for "traffic."

Section 9. "*All materials and stores required for the construction and working* of the rail- "way, *shall be entitled to a drawback for the amount of import duties* paid thereon by "the said parties of the second part (*i.e.* the concessionaires.")

Section 11. "And it is mutually agreed, that prior to the opening of a railroad, a traffic "arrangement shall be made between the said parties of the second part of the Pro- "vincial Government, for the mutual use and employment of their respective lines of "railway between Halifax and Windsor, and Windsor and Annapolis, including run- "ning powers, or for the joint operations thereof on equitable terms, to be settled by "two arbitrators to be chosen by the said parties in the usual way in case of dif- "ference; and in case of failure of said arbitrators to make an award, or to choose an "umpire in the premises, it is further agreed that the said traffic arrangement shall "be settled by such third person, together with one or both of the said arbitrators "as the Board of Trade in England shall, on the application of either of the parties "hereto for that purpose, appoint."

Section 12. "The Government of the said Province shall, and will well and truly pay, for "the building and maintenance of the said bridge across the said River Avon, the "sum of £32,000."

Section 13. "And it is further mutually agreed between the said parties that the said line "of railway, including the said bridge, viaduct, aboiteau, or other suitable erection "across the said River Avon, with all and singular the appurtenances when built, "shall be the property of the said parties of the second part (*i.e.* the contractors), or "their assigns, and shall be operated, managed, and upheld by them, at their own "proper costs and charges."

Section 15. "And it is further mutually agreed, that for the purpose of carrying out the "agreement, the said parties of the second part, or their assigns, shall have power to "form a joint stock company, to be incorporoted by Act of Parliament of Nova Scotia, "and when and so soon as such company is formed, and capital subscribed to the sat- "isfaction of the said Chief Commissioner of Railways of the Province of Nova Scotia, "The said intended company, so to be formed, shall possess the said railway and "works for the purpose aforesaid, subject to the terms of this agreement.

Several Acts have since been passed by the Legislature of Nova Scotia, with the view of reconciling the anaiomies apparent in the before recited Acts and Agreement; but though they in some respects support, still more strongly, the claims of your memorialists,

yet, as it was on the faith of the Acts and Agreement before quoted (no other acts having then been passed) that, your memorialists were induced to embark their capital, they rest their case upon, and confine their remarks to these.

Interpretation of the Documents.

6. Your memorialists were led to believe that they were embarking in the construction of a Government Railroad, for all the Acts expressly designated it as a *Public Provincial Work.* The Acts further declared, that it was designed to benefit the Province, and to open up through communication with the neighboring Provinces and States. It appeared to your memorialists, an important portion of the Government system of Railroads, designed to form the Main Trunk of the best through route—as it undoubtedly is—between Halifax and St. John, New Brunswick. Your memorialists also observed that the Government were to locate the line; that the Counties through which it passed were to provide the land; that such provision was to operate *as a dedication to the public;* that the Government Engineer was to supervise the work of construction, and to certify the value thereof. Private enterprise, it appeared to your memorialists, was only required to provide a portion of the capital required for the work of construction, the Government advancing £188,600 towards the cost. And, in reliance on the good faith of the Government, your memorialists concurred in the condition which required them, so long as they might continue to work the railroad, to carry the Government troops, baggage, stores, and mails at defined and very low rates; and in the restrictions which bound them, on the one hand, to obtain the concurrence of the Government to the tolls to be charged to the public, and on the other, not to sell the line, except to the Government themselves, who reserved the power to enter into possession of the railroad at any time on payment of the cost.

Memorialists relied on protection of the Government.

7. Your memorialists relied therefore upon the Government both as to the work of construction, and as to the remunerative working of the Railroad when constructed. They also believed that the Government would secure to them a fair interest upon their capital; and they further believed that as the Government could, and no doubt would, take possession of the property whenever it became remunerative enough to tempt them to do so, so also they would take to the property whenever it failed to yield a fair interest on the money embarked in it, and especially so if that failure was brought about by any action of the Government.

Memorialists completed their part of the contract.

8. Your memorialists, immediately on their incorporation, and on the faith of the Acts and Agreement before quoted, provided the capital for and proceeded vigorously with the construction of the railroad. The final report of the Government Engineer, presented to the Legislature of Nova Scotia on the 25th of January, 1870, will show, that your memorialists more than complied with the terms of their contract, both in letter and in spirit. The following extracts from that document will, however, suffice to demonstrate this.

Grades and Curves.

"In this respect the Windsor and Annapolis Railway compares very favorably
" with the Nova Scotia Railways, particularly with the Windsor Branch, over which
" all the traffic for the western counties from Halifax must be carried."

Earthwork.

"The width of cuttings average about eighteen feet, but in many of the clay cut-
" tings this has been increased. The formation width of embankments is from fifteen
" to sixteen feet. Nearly all the embankments were made by carts, and are stand-
" ing well"

*The Avon Bridge.**

" The whole of the masonry is built of good sound sandstone and Portland cement,
" is first-class quarryf-aced ashlar, well backed with flat bedded stone, and the
" whole of the joints and interstices filled with cement." Great care was taken in
" its construction and erection. Every arrangement was made for the vigorous

*This your memorialists might have built of wood at a considerable saving of expense to them.

"prosecution of the work. The ironwork always arrived from England before it "was required, and in order to avoid the risk of being behind time, the last two "large spans were sent from England by the Inman Steamships. Thus in about two "years this important work was completed."

Timber Bridges.

"The timber used in the construction of all the bridges is the best the country "affords, and is principally black spruce. Every precaution was taken by the Con- "tractors to have all piles well driven. All the bridges have been thoroughly "tested by the passage of heavy trains, and have stood well."

Ballasting.

"By the schedule, a quantity of ballast, not less than two thousand five hundred "cubic yards to the mile, was required. This has generally been exceeded."

Permanent Way.

"The whole is laid with the ⊥ rail of two patterns, one weighing sixty-seven "poundst to the yard—the heaviest rail laid in the country; the other weighing "fifty pounds to the yard. The sleepers are principally of black spruce, nine feet long, "ten inches wide, and five inches deep, half round or flatted, and the rails are "carefully bedded in each. There are over two hundred thousand sleepers in the "road. The trains run very smoothly, with remarkable freedom from oscillation, "even when a good rate of speed is maintained; and the fish plate gives a smooth "running road."

Stations.

"The contract specified that the Contractors were to provide ten stations. There "are now twenty-one on the line. Of these, the principal ones are at Kentville "and Annapolis. At both these stations, in addition to the platform and siding "accommodation, there are roomy engine sheds, each to hold three engines, turn- "tables, &c. At Kentville, a large addition has been made to the engine shed for "the purposes of a work shop."

Annapolis Pier.

"At Annapolis a 'goods' shed has been erected, and a first rate timber pier, built "with crib work well ballasted. It is four hundred and fifty feet long. It has a "floating landing stage, and is a very substantial work. This was not required by "the contract."

Rolling Stock.

"The quantity in list annexed has been provided by the Contractors. Six of the "engines were sent out from England, and are specially designed for heavy work. "They burn either coal or wood, weigh about fifty tons, and in their design the latest "improvements were introduced. The boilers are remarkable for their strength."

Completion of the Line.

"On the 18th of August, 1869, (viz., four months before the contract time), seventy "miles of line, from the Gaspereaux to Annapolis, were formally opened by the Gov- "ernor General. Since that time, a portion of the line between Horton and Wolfville "has, however, been damaged by the breaking of the dykes from high tides. The "injury done was immediately repaired by the Company, so that in December every- "thing was ready for the opening, and on the 18th of December, a few days later "than the contract time, the whole road was open for traffic."*

Memorialists have continued to work the line. Result unsatisfactory.

9. Your memorialists having thus completed the construction of the railroad, proceeded to operate and manage it in the best possible manner; but, though they have continued to work it with energy and regularity now for more than eighteen months, it is with regret that they find, as already communicated to the Government, that the income, after payment of expenses, is insufficient

† It will be observed that your memorialists were only required to lay down rails weighing forty-two pounds to the yard.

* But for the breaking of the dykes, over which your memorialists had no control, the whole of the road would have been opened considerably before the contract time.

not only to permit of any return upon your memorialists capital, but also of the payment of any considerable portion of the interest upon the debenture debt. Your memorialists are also, as a consequence, unable to raise the capital with which to discharge the principal of the debenture debt; and they have therefore been obliged to embark further capital, and incur further liabilities, together amounting to about £50,000, in order to provide for the wants of the railway, and to meet the accruing debenture interest; and your memorialists venture to submit, as some proof that this deficiency is not due to want of management on their part, that the result of the working of the 145 miles of the Government Railways in Nova Scotia in the year ending the 30th of June, 1869, was a gross income of $272,237, obtained upon an expenditure of $268,560. (Vide Appendix No. 17 to the General Report of the Minister of Public Works for the year ending 30th of June, 1869)—whilst in the preceding year, the income was but $253,994, obtained upon an expenditure of $255,530.

Memorialists throw themselves upon the protection of the Government.

10. Your memorialists, under these circumstances, feel themselves compelled, with great regret, to state that they cannot offer to continue to work the railroad under the present unsatisfactory arrangements with the Government; and they therefore throw themselves upon the protection of the Government, to which they humbly submit they are entitled.

Embarrassments increased by action of Government.

11. Your memorialists venture to submit, that their embarrassments have been greatly increased by the action of the Dominion Government, (who have in this matter become the successors of the Government of the Province of Nova Scotia), who, in ignorance doubtless of the circumstances under which your memorialists were lead to embark their capital in the railroad, have not only deprived your memorialists of all protection and support but also denied them rights and facilities specifically conceded by the Legislature of the Provivince of Nova Scotia, and have further fostered and subsidized rival enterprizes contrary to the spirit and intention of the agreement entered into with that Legislature.

Confederation has altered the views of the Government, and made them competitors.

12. Your memorialists are impressed with the belief that the lukewarm and even hostile attitude assumed by the Government towards them, has arisen in the main with Confederation, which has made the Government interest in the Intercolonial line of paramount importance. At the time when the Annapolis line was first designed, the Government of the Province of Nova Scotia intended to construct, own, and work the line to Amherst, on the New Brunswick frontier, as well as that to Annapolis, on the Bay of Fundy; *their* interest, therefore was, if anything, greater in the Annapolis route than in the Amherst route,—

The distance from Halifax to Amherst being 122 miles,
Whilst that to Annapolis was ..... 129 miles;

And even when in 1865 the Act was passed authorizing the construction of the lines from Windsor to Annapolis and from Truro to Amherst, by private enterprize, the interest of the Government, viewed in its narrowest and most mercenary light, was but a trifle greater in the Amherst route, seeing that the distances which would then have had to be traversed over the Government lines proper, would have been

By the Annapolis route:
Halifax to Windsor, 45 miles, and
By the Amherst route:
Halifax to Truro, 61 miles;

And as it was then clearly the intention of the Government to acquire both the Windsor and Annapolis and Truro and Amherst Railroads, which, for financial reasons, were at that time designed to be made by private enterprize, in the first instance; the *ultimate* interest of the Government in the two routes was, as before stated, somewhat greater in the Annapolis than in the Amherst route. By the Act of Confederation, the interest of the Government has become absorbed in the Amherst route. In the first place the railroad from Truro to Amherst, which in 1865 was to have been made by private enterprize

in the same way as the Windsor and Annapolis railroad, was incorporated into, and made part of the Intercolonial System, which at once gave the Government a preponderating interest in the Amherst route; the interest in the Amherst route being thereby extended from

Halifax to Amherst,. ..... 122 miles,

whilst their interest in the Annapolis route remained confined to the distance between

Halifax and Windsor—viz. :— ..... 45 miles.

In the second place, Confederation still further increased the preponderence of interest in the Amherst route, for by it the whole Intercolonial system from Halifax to Rivière de Loup, and from Shediac to St. John, 498 miles, has become the property of the United or Dominion Government, so that it is now the policy of the Government, as has been stated by its officers, to crush out the opposition of the Windsor and Annapolis line.

13. Your memorialists, however, submit that such considerations cannot weigh with a Government so enlightened as that of the Dominion, when once they have the circumstances brought to their notice. Your memoralists submit, that, on the grounds of justice and equity, the Government are bound either to protect your memorialists, or to exercise the right of purchase, which they have; and further, that on public grounds, the railroad deserves the utmost support from the Governments, as being a great benefit to the Provinces, both of Nova Scotia and New Brunswick. The Superintendant of the Nova Scotia Railway in his Report of October, 1870, to the Minister of Public Works, speaking of the Windsor and Annapolis Railway, states—

Public and private grounds why Memorialists should be protected.

"When this line was opened for traffic, the steamer plying between St. John, N.B., "and Windsor, N.S., during the summer months, was withdrawn from the route, and "placed on the route between St. John and Annapolis, connecting with the railway at "the latter port. By this arrangement, a regular communication was kept up, during the "winter months, between Nova Scotia and New Brunswick, thereby supplying a want "long and seriously felt in both Provinces."

But beyond this, it is a fact, that the revenues and the value of lands and all other property in the counties through which the railway runs have been doubled and even trebled since the projection of the railway. And though your memorialists admit that for military purposes, and as a means of communication with the more distant portions of the Dominion, the Intercolonial Railroad is of great value, yet, for the more important purposes of trade and commerce, the Windsor and Annapolis Railroad supplies, not only a great and pressing local want of the western counties of the Province of Nova Scotia, but affords a route shorter by 84 miles, more expeditious, and considerably cheaper than the route *viâ* Amherst, between those two most important centres of trade—Halifax and St. John, New Brunswick.

14. Your memorialists further submit, that apart from any hopes of assistance to which they may have been led to look forward, the Government contribution of £188,600 was most inadequate, amounting as it did to but £2,200 per mile, out of a total cost of upwards of £9,000 per mile.* Your memorialists also submit that the subvention sanctioned by the Act of 1865, viz.—of 4 per cent. on $24,000 per mile, equivalent to a total subvention of £16,320 sterling per annum, although terminable in twenty years, would have been more advantageous to your memorialists; and further, that if such subvention had been capitalized in the terms of clause 5 of that Act, the capitalized sum to which your memorialists would have been entitled would have been £326,400. Your memorialists further submit that even the original subvention was very small, when compared with that offered for the construction of the railroad between Truro and Amherst, which amounted to 4 per cent. on $40,000 per mile, being equivalent to an annual payment of

Insufficiency of original grant.

* The one hundred and forty-five miles of Railroad constructed by the Government of Nova Scotia cost $6,791,254, or equal to $46,837, or £9,367, sterling, per mile. (Vide Appendix, No. 17, to the General Report of the Minister of Public Works, 1869.)

£19,200, sterling, for twenty years, besides which the Government granted a subscription of $400,000 or £80,000 sterling, towards its cost ; whilst, on the 4th of March, 1864, the then Provincial Secretary of the Province of Nova Scotia, in a letter written by him to the European and North American Railway Company (vide Appendix No. 7 to the Journal of the House of Assembly of Nova Scotia for the year 1865) offered a *perpetual subvention* of £16,000, sterling, *to facilitate* the construction of the same railroad.

Failure of previous contractor.

15. Your memorialists would humbly beg to point out that numerous unsuccessful attempts were made to induce capitalists to embark in the enterprize, even on terms much more advantageous than those granted to your memorialists. Before your memorialists were led to embark their capital, an agreement had been entered into with the Contractors, George Knight and Co., of London ; and on the 14th of March, 1866, an Act was passed by the Nova Scotia Legislature, incorporating a company, with the object of giving effect thereto, a clause being inserted, however, providing that—

"This Act shall cease and determine if the railroad herein contemplated and men-
"tioned shall not be effectually commenced and vigorously prosecuted within six months
"from the passing hereof."

Another clause also provided—

"That the amount of the subvention to be paid hereunder shall be reckoned on
"eighty-five miles ,or £16,320 sterling per annum, to be paid half yearly in London, the
"*first payment thereof to fall due six months after the commencement of the work.*"

And yet on these more favorable terms the arrangement fell through from the inability of those contractors to give effect to it. As showing further the difficulty experienced by the Province in inducing capitalists to embark in the enterprize, they venture to refer to the Report of the Chief Commissioner of the Government Railways of Nova Scotia, bearing date the 31st of October, 1866. (Vide Appendix No. 11 to the Journal of House of Assembly of Nova Scotia, 1867), which contains the following paragraph :

"I regret to say that owing to the financial panic which occurred in England
"during the early part of the present season, under which several of the most noted
"railway firms succumbed, and which spread general distrust throughout money circles
"in England and on the Continent, the parties who contracted to build the Windsor
"and Annapolis Railroad were unable to fulfill their engagement. The Honorable
"Provincial Secretary and other members of the Government who have been in London
"since July last on other important business, have been indefatigable in their exertions
"on behalf of this line. I think I may say this, that the people of the western part of
"the Province may rely upon some means being found to push on the work with vigor
"during the ensuing year. The Government is virtually committed to the undertaking
"and will not see it abandoned."

Financial pressure in province.

16. Your memorialists also submit, that their interests were most seriously affected by the pressure on the financial affairs of the Province, at the time they embarked in the enterprize ; of the 288 miles of railroad sanctioned in 1854, but 95 miles had been completed, yet the debt of the Province had increased to nearly five million of dollars. And it appears from a minute of the Chief Engineer of the Government Railways of the 10th of December, 1864 (vide Appendix No. 7 of the Journals of the House of Assembly of Nova Scotia, 1865), that considerable difficulty was experienced in providing the capital to secure the completion of the Windsor and Annapolis Railroad, after an adequate provision was made for the completion of the Pictou branch, without making the debt of the Province to exceed the figure of eight million dollars, with which it had been agreed the Province should enter the Dominion. This minute is as follows :

"*Nova Scotia Railway.*

"The Government of Nova Scotia desires to secure the construction of a
"Railway from Truro to Moncton ; this, forming part of the Intercolonial, would be

"built at the expense of the United Provinces. In anticipation of an union at an "early date, this line may enter into a *general arrangement* now proposed and its "construction be commenced under the subvention resolution of last Session.* The "Government desire to secure the construction and completion of a branch to Pictou, "and a branch to Annapolis, for a sum which added to the present debt of the

"Province would not exceed	$8,000,000
"Present debt	4,858,547
	3,141,453
"Pictou line estimated to cost	2,000,000
	$1,141,453

"The balance $1,141,453 for the Annapolis line, would not at present be "available and this work would have to be commenced under the subvention reso- "lution passed by the Legislature last session." *

"On the union of the Provinces, the existing railways and the Pictou extension will "belong to the Confederation Government. In the meantime, the Government of Nova "Scotia, in order to facilitate arrangements with parties disposed to carry out these ex- "tensions, will be disposed to lease these lines, receiving therefor the actual *net earnings* "until the union of the Provinces be effected. Upon the union of the Provinces these "railways to be held under the Confederate Government upon such equitable terms as "may be agreed upon. In the event of the Annapolis line being completed before the "union of the Provinces is effected, it will be operated in connection with the other lines "and under the same management, the actual receipts of the whole to be allotted as under. "After the Union a similar equitable arrangement to be made.

"Lines constructed	93	miles	143
"Pictou line	50	"	
"Annapolis	85	"	85
	228		228

"Due to the Province $\frac{1}{2}\frac{1}{2}\frac{4}{8}$ of net earnings.

"Do. Annapolis line $\frac{8}{2}\frac{5}{2}\frac{}{8}$ do. do.

"In the construction of these lines the Province to furnish right of way and fencing free, "and materials for construction to be carried on existing lines free of charge (handling not "included.) In the union of the Provinces, the balance, $1,141,453, may be paid for the "Annapolis line in lieu of the 20 years' annual bonus of £240 per mile under the sub- "vention resolution.

"The proposed arrangements embrace the following points :—

"1. The working of existing lines in the Province, and all lines to be constructed, "under one management, on equitable terms."

"2. The building of the Annapolis road under existing Legislative enactments."

"3. The commencement of the Truro and Moncton sections under the authority of "the legislation already obtained."

"4. The completion of the branch to Pictou and Annapolis for such a sum as will "allow Nova Scotia to enter the Union with a debt not exceeding $8,000,000."

This document, though ambiguous in some respects, shows conclusively that in order

* The Resolution above referred to was passed by the Honorable the House of Assembly of Nova Scotia on the 11th of April, 1864, and was as follows :—

"*Resolved*, That the Executive Government be authorized to secure the construction of the railroad from "Truro, or from the point of junction with the main line to the border of New Brunswick, through the agency "of any responsible company, provided no greater liability is incurred than 4 per cent. per annum, upon a "capital of £10,000 currency per mile, for a period not to exceed twenty years ; and provided connection "is thereby secured with the railroad from St. John to Shediac ; and that the Government be authorized to "procure the construction of the line west of Windsor, in the same manner, to the same extent of 4 per "cent. on a capital of £6,000 per mile."

to conform to the terms of the proposed Confederation, and, at the same time, secure the commencement of the system of railways which the people of the Province were eager to have completed,

The Annapolis line, of 85 miles, was to have alloted to it but $1,141,453 = $13,429 per mile,

Whilst the Pictou line, of only 50 miles, which was to be made by the Government themselves, was to have allotted to it..... $2,000,000 = $40,000 per mile,

And assuming the cost of the 95 miles of line, then completed by the Government, to be represented by the then debt of $4,858,547, they cost..... $51,142 per mile.

The arrangements shadowed forth in this document, were evidently intended to bridge over the gap which existed between the completion of the Railways and Confederation: for the same clause which provides that the line from Truro to Moncton was to be commenced under the subvention resolution passed by House of Assembly, also states that it was to be made a part of the Intercolonial, and constructed at the expense of the United Provinces: and so again it was provided that the Annapolis line should be begun under the subvention resolution, and afterwards re-arranged after the Province entered the Union whilst so far as concerned the Pictou branch, the allotment was, for some reason not explained, made fairly ample and definite.

Effect if the Government had constructed the line.

17. Your memorialists would further point out, that had the Government carried out their original intention of constructing, owning and working the Windsor and Annapolis line themselves, it would, even if it had not cost them more than your memorialists have paid for it, have cost them £770,600;* the annual interest on which, at 6 per cent. per annum—the then borrowing rate of the Province of Nova Scotia—would have amounted to £46,236; whereas the Province now, having all the same advantages from the Railroad, only pays £13,236 per annum.

Refusal of Government to admit rights specifically conceded to Memorialists.

18. Your memorialists humbly beg, further, to point out some of the more important instances in which the Government have infringed the specific conditions of the Acts and Agreement before quoted.

Firstly, and most importantly, they have refused to allow your memorialists to exercise the rights conferred by clause 11 of the Agreement, which provides —

"That prior to the opening of the railroad, a traffic arrangement shall be made "between the said parties of the second part (viz.—the contractors), and the Provincial "Government, for the mutual use and employment of their respective lines of railway "between Halifax and Windsor, and Windsor and Annapolis, including running powers, "or for the joint operations thereof, on equitable terms, *to be settled by two arbitrators.*†

Your memorialists, several months before the line was completed, applied, through their Manager, to the then Minister of Public Works, at Ottawa, as to the exercise of the running power into Halifax, when the Minister intimated that he intended to visit Nova Scotia, and would then look into the matter. The Minister subsequently made the promised visit, and then declined to act in the matter. At this time the line was rapidly approaching completion, and the Manager, failing in his endeavours to obtain arrangements for the exercise of the powers, entered into a temporary arrangement with the then General Superintendent of the Government Railways, for the interchange of traffic. This arrangement, it was distinctly understood, was to be provisional only. Your memorialists need hardly say, that these running powers are essential for the accommodation and development of the through traffic; without such powers, your memorialists

*The £770,600 given above, as the cost of the line, is made up as follows:—

Government contribution.....	£188,600	0	0
Capital of W. and A. Company.....	300,000	0	0
Debentures and floating debt.....	250,000	0	0
Cost of Avon Bridge.....	32,000	0	0

†These words do not appear in the printed version, contained in N. S. Statutes 1866, Cap. 1, pages 7 and 14, but see contract Nov. 22, 1866.

are quite unable to make the arrangements necessary for the development of that traffic, upon which the success of the Windsor and Annapolis Railway must always largely depend.

Secondly, They have imposed upon your memorialists the payment of duties upon materials and stores imported for the working of the railway, in direct violation of the provisions of clause 9 of the Agreement, which provides—

"That all materials and stores required for the construction and working of the rail-"way shall be entitled to a drawback of the amount of import duties paid thereon."

Thirdly, They have allowed your memorialists to be assessed for local taxes, from which your memorialists, as owning a Public Provincial Work, were to be exempt, under the Revised Statutes of Nova Scotia of 1864, 28 Vic., Cap. 45, Section 16, which provides—

"The following property shall be exempt from taxation :—The Provincial Peniten-"tiary, and the lands attached thereto; the Provincial Lunatic Asylum, and the "lands attached thereto; the Provincial Railway, rolling stock, and railway stations, "and lands attached thereto, or to the railway."

Your memorialists having submitted this question to the Attorney General of the Province of Nova Scotia, they beg to quote from his opinion, as follows :—

"That the section is a Public or Provincial Railway is perfectly obvious," and again "to render it clear beyond a dispute that the section is a Provincial Railway "and Public Work, the Statute of 1865 expressly provides that the Government "shall at any time take the road entirely into their own hands. As long, therefore, "as the Company are allowed to hold, manage, and operate the railway, it must be "considered and looked upon as a Provincial Railway, in the hands and possession "of a private company or corporation, who, in consideration of what they have con-"tributed towards its construction, are allowed to have the management of it, and "to receive the profits or earnings of it to their own use, subject, however, at any "time, to hand it over to the Government, upon receiving reasonable compensation "for their outlay in its construction, and other claims upon the property. In this "light it may be viewed as a Public Railway in the hands of a private corporation, as "(*quasi*) lessees under the Government."

Fourthly, They have failed to comply with the provisions of clause 7 of the Agreement, which provides—

"That all lands required for the railway track and appurtenances shall be provided "'*gratis*,' 'as under the provisions of section 11, chapter 70 of the Revised Statutes' (already quoted.)

Your memorialists have in one case been sued for a large amount, and have in several instances been threatened with expulsion from the land taken for the railroad, involving them thereby in considerable litigation and expense. Your memorialists have, further, never received the land required by them at their Windsor station, although they have, with a view to relieve the Government of expense, agreed, at their request, to receive other lands now in the possession of the Government there, which are, in your memorialists' opinion, inferior for their purpose to those originally scheduled by them.

Fifthly, They have failed in several respects to comply with the provisions of clause 6 of the Agreement, which provides

"That for the subvention," 'capitalized at the agreed sum of £188,600, sterling,' "the Provincial Bonds, or Debentures, issued in the ordinary form, bearing 6 per cent. "interest, shall be delivered at par to the parties of the second part (viz.—the Contractors,) "or the assignees or nominees; but such Bonds shall only be delivered with the coupons "attached, bearing interest from the preceding 1st of January or 1st July, as the case "may be, prior to such delivery: such delivery to the said parties shall be within four-"teen days from the date of such certificate."

Your memorialists, almost immediately after they had commenced the work of construction, were informed that the Government would have to substitute cash payments for the Government Bonds. Your memorialists subsequently learned that the inability of the

Government to issue the Bonds arcse out of a prevoius contract with the Messrs. Barings, of London. The payments were made in cash in lieu of bonds, and a large discount was moreover insisted upon, and deducted by the Government from the par value. Your memoralists deem themselves entitled, therefore, to receive from the Government the amount not only so deducted, but also of any premium obtained by them upon the Bonds. As the Bonds were to have carried interest as from the preceding first of January, or first of July, as the case might be, your memorialists were entitled to interest upon cash payments as from those dates to the dates of payment; but not only have your memorialists not received such interest, but they have been still further prejudiced by the cash payments being in all cases delayed considerably after the stipulated time of fourteen days from the dates of the certificates.

Sixthly, That whilst your memoralists were bound, as they admit, to obtain the concurrence of the Government in the tolls to be charged by them, it could never have been intended that your memorialists should be charged a higher rate of tolls over the Government line than thus charged by the Government to the public. The fact is, however, that such has been the case for a considerable time past, your memorialists having been so surcharged in respect to cattle, horses, hay, &c., between the stations on the Annapolis road and Halifax, involving a loss of from 20 to 40 per cent. as between your memorialists and the public. The result of this unjustifiable and arbitrary action of the Government representatives has been the total annihilation of an important branch of your memorialists' trade, and great inconvenience of the public.

Seventhly and lastly, Your memorialists contend that the first object for which the railroad was designed, was the formation of a through route across the Province, for the traffic between Halifax and St. John; and they were, moreover, led to believe that the Government would support your memorialists' efforts to induce such traffic to follow that route. Your memorialists are therefore both disappointed and alarmed to find that a line of steamers between Halifax and St. John, direct, and another line of steamers between Windsor and St. John, have been put on under subsidies granted by the Government. Your memorialists believe that the Government can hardly be aware of the fact that the subsidies received by the first mentioned steamers, viz. :—of $13,000 per annum, are more than sufficient to defray the total cost of their working, and that they, consequently come most unfairly into competition with the Windsor and Annapolis road, to the serious detriment and loss of your memorialists. In the case of the last mentioned steamer, the subvention of from $3,000 to $4,000 is nearly equal to the total amount paid to your memorialists for the carriage of the mails and Government stores, including a provision of special postal cars run upwards of fifty thousand miles in the year.

19. And, finally, your memorialists, believing in the just and equitable intentions of the Government, humbly ask for such redress as the circumstances of your memorialists' peculiarly hard case warrant. Prayer of Memorialists.

Your memorialists urge most strongly that the Government are bound in honor and in fairness,—

To put in force the powers of purchase conferred upon the Government by clauses 7, 8, and 10 of the Act of the Local Legislature of Nova Scotia, Session 1865, 28 Vic., Cap. 13.

And this your memorialists claim.

Your memorialists, however, venture to submit that, if from any reasons of State or of policy, a compliance with your memorialists' claim be deemed impracticable, then substantial redress should be made to them, either—

(1) By conveying or transferring to your memorialists the railroad between Windsor and Waverley Junction, forming, as that does, a part of the Annapolis section of the railroads of the Province, and which the Act of 1864 clearly enacted should be worked together with the road from Windsor to Annapolis under one management.

(2) By making all requisite arrangements to permit of your memorialists exercising free and unrestricted running powers over the Government line between the said

Waverley Junction and Halifax, including the use of all stations and conveniences now or hereafter to be erected in Halifax.

(3) By granting fair compensation to your memorialists for the loss and damage caused by the past action of the Government ; and

(4) By granting to your memoralists such an annual grant as will be sufficient, together with the net annual income of such combined railroads, to pay the interest upon the fixed and floating debts of the Windsor and Annapolis Railway, and a fair return upon the capital embarked by your memorialists ; or

(1) By leasing the Windsor and Annapolis Railroad from your memorialists upon payment of such a fixed or increasing annual rent as will provide for the interest upon the Debenture and floating debts, and give your memorialists a fair return on their capital ; and

(2) By granting fair compensation to your memorialists for the loss and damage caused by the past action of the Government.

And your memorialists will ever pray, &c., &c.

The Windsor and Annapolis Railway Company, Limited, Under the hand of their lawfully constituted Commissioner and Attorney.

JAMES ALEXANDER MANN.

HALIFAX, July, 1871.

(No. 2,901.)

THE RUSSELL HOUSE,

OTTAWA, 27th July, 1871.

Windsor and Annapolis Railway Co's. Memorial.

MY DEAR SIR,—As confirmatory of the views taken by my friends in London, I think it right to mention that I have just received a telegram from the manager, stating that the appeal upon the question of the liability of the railway to taxation has just been given in our favor. The Judges deciding unanimously that the Railway is a Public Provincial work, and as such, exempt from taxation.

Yours faithfully;

(Signed,) J. A. MANN.

The Honorable H. Langevin.

&c., &c.

(No. 1,602½.)

Memorandum :

The undersigned has the honor to report, that it is not expedient to purchase the Windsor and Annapolis Railway under present circumstances ; the undersigned is not prepared to ask Parliament to put a vote of money at the disposal of Government for that purpose. That the conveyance and transfer of the railroad between Windsor and Waverley Junction to the Windsor and Annapolis Railway, would be contrary to the policy of Government as sanctioned by Parliament, and could not be effected without an Act of Parliament, which the undersigned would object to diminishing the value of the Intercolonial Railway. That the said Company have, by their Charter, no right to any grant of money from the Government or Parliament, and the Government have no vote of money for such a purpose. The undersigned therefore recommends that he be authorized to make with said Company the traffic arrangements including "running powers"

mentioned in the Charter of said Company, and for that purpose to appoint any officer or arbitrator required by said Charter, should the Company and the undersigned be unable to make the traffic arrangements without arbitration.

The whole respectfully submitted.

(Signed,) HECTOR L. LANGEVIN.

(2,916.)

Copy of a Report of a Committee of the Honorable the Privy Council, dated 28th July, 1871.

On a memorandum, dated 28th July, 1871, from the Honorable the Minister of Public Works, reporting upon the memorial of James Alexander Mann, Esq., Commissioner and Attorney of the Windsor and Annapolis Railway Company, that it is not expedient to purchase the said railway under present circumstances, and that he is not prepared to ask Parliament to place a vote of money at the disposal of the Government for that purpose.

That the conveyance and transfer of the railroad between Windsor and Waverley Junction to the Windsor and Annapolis Railway Company would be contrary to the policy of the Government as sanctioned by Parliament, and could not be effected without an Act of Parliament.

That the said Company have, by their Charter, no right to a grant of money from the Government or Parliament, and the Government have no vote of money for such a purpose.

The Minister therefore recommends that he be authorized to make with the said Company the traffic arrangements, including running powers, mentioned in the Charter of said Company, and for that purpose to appoint any officer or arbitrator, required by the Charter of the Windsor and Annapolis Railway Company, should the Company and he, the Minister of Public Works, be unable to make those traffic arrangements without arbitration.

The Committee submit the foregoing recommendations for Your Excellency's approval.

Certified,

WILLIAM H. LEE,
Clerk, Privy Council.

The Honorable the Minister of Public Works.

(No. 2,920.)

OTTAWA, 1st August, 1871.

SIR,—I. I have the honor to acknowledge receipt of your letter of this date, from which I learn with regret that the Dominion Government decline to accede to the prayer of the Windsor and Annapolis Railway Company excepting only as to so much thereof as relates to the running powers conferred upon them under their agreement with the Government of the Province of Nova Scotia.

II. I need hardly say that the Company will be very much surprised and disappointed at this decision of the Dominion Government, and unless the Provincial Government recognize the moral and legal obligations now repudiated by the Dominion Government, I am afraid the Company will not consider themselves bound to continue to work the line. The Company are extremely anxious to avoid closing the line, causing, as it would, much inconvenience and loss to the people of Nova Scotia and New Brunswick, and will therefore await the decision of the Provincial Government with much anxiety.

III. I observe that, so far as concerns the claims for compensation, &c., preferred by the Company, the decision of the Dominion Government is only general, and, at the risk of being deemed troublesome, I venture to ask if it is intended to repudiate the whole of these claims upon their merits—In order that I may not misunderstand the intention of the Dominion Government on this point, I recapitulate the claims put forward by the Company, which are as follows:—

1. For compensation in respect of loss and damage occasioned by the past refusal of the Dominion Government to allow the Company to exercise the rights and privileges conferred upon them under clause 11, of the agreement of 22nd November, 1866.

2. To have refunded to them the duties (together with interest thereon) and upon certain materials and stores imported by them for the construction and working of the railway—and to have allowed to them, in terms of clause 9 of the said agreement, a drawback of all duties upon all stores or materials hereafter to be imported by the Company for either of such purposes.

3. To have paid to them interest upon the principal payments made under clause 6 of the said agreement, as from the dates from which such payments would, if they had been made in Provincial Bonds, in terms of such agreement, have carried interest and dividends until the date of actual payment.

4. To have paid to them all such sum or sums (together with interest thereon as before stated) as were deducted by the Government from the par value of such Provincial Bonds.

5. To have conveyed to them free of charge, in terms of clause 7 of the said agreements, certain lands required for the railway track and stations.

6. To have conveyed to them free of charge, also in terms of the said agreement, a parcel of land at or near Windsor, and now in possession of the Dominion Government, and which it was specially agreed with and enacted by the Legislature of the Province of Nova Scotia, should be so conveyed to the Company.

7. To be reimbursed all loss and expenses incurred by the Company in respect of the acquisition of the lands required for the railway, and which were, under clause 7 of the said agreement, to be conveyed to the Company free of charge."

8. To be re-imbursed all loss, damages and expenses, incurred by the Company, in consequence of the Dominion Government charging the Company a higher rate of toll on certain traffic, (to wit, in cattle and horses, hay, &c.,) conveyed over the line between Windsor and Halifax, or some part or parts thereof, than charged to the general public.

9. To be compensated in respect of direct and incidental damages arising out of the subsidizing of steamers by the Government in contravention of the spirit and intention of the Acts and agreement framing the basis of the Company's proceedings.

IV. As to that portion of your letter, which states that the Government have no funds applicable for the purposes of the Company, I apprehend that it is not intended that the Ministers of the Government would for that reason decline to acknowledge any just claim upon the State, even though it might be necessary afterwards to obtain a vote of the Legislature for the purpose of discharging it.

V. As the Company must now, of course, proceed to memorialize the Legislature of the Province of Nova Scotia, with whom the contract was originally made, it becomes important that the Company should understand clearly how far the Dominion Government claim the rights and acknowledge the obligations originally conferred upon the Provincial Legislature, under the Acts and the Agreement framing the basis of the understanding with the Company. From the conversation which I had with the Honorable the Minister of Public Works, I am led to believe that the Dominion Government claim to have the right, and acknowledge the obligation, to deal only with those questions directly affecting the Customs Revenue, and the railways taken over by them, which would, I assume, only include the claims before referred to, under the Numbers 1, 2, 6, and 8, and would leave the claims numbered 3, 4, 5, 7, and 9, to be dealt with by the Provincial Government, whilst the right of purchase under clauses 7, 8 and 10, of the Act of the Provincial Legislature of 1865, and the power of controlling the rate of tolls to be charged by the Company to the public, under clauses 3 and 8, of the agreement of 22nd November, 1866, would, so far as they may now remain in force, also vest in the Provincial Government, and I beg to ask the decision of the Dominion Government on these points.

VI. I am prepared, on behalf of the Company, and am moreover anxious to meet any

representative whom the Government may appoint, with a view to deal with the matter under Clause 11 of the said agreement, which, I would point out, are not confined exclusively to a traffic arrangement including "running powers," but also extend as an alternative to a joint operation of the two lines.

In the interim of course the Company continues to suffer direct loss from the delay which the Dominion Government have created, and it must of course be understood that the Company's claim for compensation is not to be prejudiced by any action of such representatives unless such matter of compensation be also submitted to them for their decision.

VII. I cannot conceal from myself the difficulty of the Company and the Government together working the traffic efficiently over so long a length as 45 miles of single line, unless the Government complete their line by the erection of the proper locking apparatus and signals, the construction of the proper slidings and passing places, and the appointment of signalmen at the proper points; but being sincerely anxious to avoid trouble, and to make the most of the two lines, in doing which I feel that I shall save the interests not only of the Company and the Dominion Government, but also of the people of the Province, I am prepared, as a further effort in the interests of peace, to offer, on behalf of the Company, to lease, work, and maintain the Government line and appurtenances from the Junction with the Company's line at Windsor to the Waverley Junction, for the period of 99 years, and to pay over to the Dominion Government, by way of rental, annually, a sum equal to ten per cent of the gross tolls earned upon the line, and for the exercise of unrestricted running powers over the remaining portion of the Government line from such Waverley Junction into Halifax, including any extensions thereof to be hereafter constructed, to pay by way of toll annually a sum equal to forty per cent of the gross tolls earned by the Company upon the line. Such payment of forty per cent to include the use of all stations and of all conveniences, and a share of the services of the station agents, booking clerks, and other servants employed by the Government at the stations, depots, and junctions.

VIII. Assuming as I do that the above offers will be acceptable, and that the views taken by me of the responsibility of the Dominion and Provincial Governments respectfully are correct, I would even venture further and offer that the claims of the Company before referred to under the heads numbered 1, 2, 6 and 8 shall, so far as the Dominion Government may decline to admit them, also be submitted to and be finally dealt with by such arbitrators or umpire, reserving only to the Company the right to prefer their claims under the heads numbered 3, 4, 5, 7, and 9, together with their request for general aid and assistance against the Provincial Government.

IX. In conclusion, I would remark that the claims of the Company have now been before the Government at different periods throughout the past eighteen months, and as I am here at great inconvenience to myself and expense to the company, wholly and exclusively for the purpose of adjusting these matters with the Dominion Government, I venture to ask for a specific and early reply to the several questions submitted and propositions made in this letter, and to state that I will remain in Ottawa until I receive such reply.

I am, Sir,
Your obedient servant,
J. A. MANN,
Commissioner and Attorney of the Windsor and
Annapolis Railway Company, Limited.

F. Braun, Esq., Secretary,
Department of Public Works,
Canada.

(No. 1,617.)

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, August 8th, 1871.

SIR,—With reference to your reply, dated the 1st instant, to my letter of same date, I have the honor to state, that by Order in Council of the 28th ultimo, the Minister of Public Works is "authorized to make with the said Company the traffic arrangements, "including running powers, mentioned in the charter of the said Company, and for that "purpose to appoint any officer or arbitrator required by the charter of the Windsor and "Annapolis Railway Company, should he and the said Company be unable to make those "traffic arrangements without arbitration." I am now to inform you that with the view of carrying out the terms and object of the Order in Council above referred to, in a friendly practicable manner, and so as to avoid, if possible, having recourse to arbitration, the Minister of Public Works has appointed Sandford Fleming, Esq., Chief Engineer of the Intercolonial Railway, to confer with the Company, or its authorized agent, on the subjects referred to, with instruction to report to him, the Minister, in regard to the arrangements which the Company will agree to make with the Government concerning "traffic arrangements" and "running powers."

I have the honor to be, Sir,
Your obedient servant,
(Signed.) F. BRAUN,
Secretary.

J. A. Mann, Esq.,
Commissioner and Attorney of the Windsor and
Annapolis Railway Company, (limited)
Kentville, N. S.

(No. 1,623.)

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, August 11th, 1871.

SIR,—I have the honor to inform you that with the view of carrying out the terms and object of an Order in Council, bearing date the 28th ultimo, copy of which is herewith transmitted, the Hon. Minister of Militia and Defence, acting in the absence of the Minister of Public Works, has appointed you to confer with the Windsor and Annapolis Railway Company, or with its authorized agent, and to report on the arrangements to be made under the authority of the said Order in Council.

In order to avoid, if possible, a recourse to arbitration, you will please examine and report to this Department what understanding and agreement can be arrived at with the Windsor and Annapolis Railway Company concerning the traffic arrangements, including "running powers" mentioned in the charter of the said Company, and in the agreement or contract dated the 22nd of November, 1866. In addition to the papers herewith transmitted, numbered in the margin, I beg to refer to the following:—Statutes of Nova Scotia for 1867, cap. 36, section 6, 7 and 11; 1866, cap. 1, section 7; 1865, cap. 13.

I am further to inform you that James A. Mann, Esq., Commissioner and Attorney of the Windsor and Annapolis Railway Company, whose present address is at Kentville, Nova Scotia, has been advised of your appointment.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) F. BRAUN,
Secretary.

Sandford Fleming, Esq.,
Chief Engineer, Intercolonial Railway,
Ottawa.

(No. 2,946.)

WINDSOR AND ANNAPOLIS RAILWAY,
KENTVILLE, 14th August, 1871.

SIR,—I have the honor to acknowledge receipt of your letter of date 8th inst., informing me in reply to my letter of the 1st inst., that Sandford Fleming, Esq., the Chief Engineer of the Intercolonial Railway, has been appointed to confer with me, with a view to reporting to the Minister in regard to the arrangements which the Company will agree to make with the Government concerning "traffic arrangements" and "running powers."

In reply, I have to state that I shall have much pleasure in meeting Mr. Fleming at any time or place he may appoint.

I cannot but feel disappointed, however, to observe that your letter makes no reference to the very liberal offer which I made in the 7th paragraph of my letter of the 1st inst., viz., to lease the line between Windsor and Waverly Junction, and to pay for running powers between the latter place and Halifax, but I trust that Mr. Fleming will have been instructed to consider and report upon that offer.

It is a matter of surprise to me also that your letter further fails to reply to the other important enquiries and propositions made in my letter, especially those conveyed in paragraphs 3, 4, 5, 7 and 8, wherein I ask whether the Dominion Government repudiate the claims preferred by the Company upon their merits, and whether the Dominion Government admit their liability, assuming the claims to be well founded, and wherein I offer to submit the claims to arbitration.

As I have before observed, it is a very serious hardship that the Company are unable to obtain the attention of the Government for these matters.

It would probably be more regular if I were to await a definite reply from the Government to the proposition I have already had the honor to lay before them, before venturing to make any further overtures, but the pressure of circumstances is such that I am compelled to break through the ordinary rules, and I now venture to supplement the offers previously made, by submitting the following proposition, with a view of settling all the difficulties between the Company and the Governments, viz :—

"Heads of proposed arrangement between the Company and the Governments of the "Dominion, of Nova Scctia, and of New Brunswick :

"1. Dominion and Nova Scotia Governments to settle between themselves the ques- "tion as to which is liable in respect to the claims of the Company for compensation, &c., "In the event of those claims proving to be valid, the claims to be submitted to arbi- "tration.

"2. Company to have a lease of the Government line from Windsor to Waverley "Junction, and running powers into Halifax, on terms of Mr. Mann's letter of 1st of "August. Representatives of the Company and of the Government to settle the mode of "working.

3. "The Company to put on a line of first-class Clyde-built ocean-going steamers "between Annapolis and St. John, running them at least once a day each way, and to "run express trains between Halifax and Annapolis, so that the entire journey from "Halifax to St. John shall not occupy more than 8½ hours.

"4. Governments together to grant the Company a subsidy of £12,500 sterling per "annum, say in the following proportions.

"£5,000 by the Dominion Government.

"£5,000 by the Nova Scotia Government.

"£2,500 by the New Brunswick Government.

"5. The Company to clear itself from liabilities,—1st, by converting its debenture "debt into a 5 per cent perpetual debenture stock. 2nd, by paying off or converting "into capital all its existing floating debts. 3rd, by providing the capital for the boat "service before mentioned, and further, to undertake not to incur any further capital "debts."

This arrangement, I feel sure, will commend itself to the attention of the Dominion Government. It will have the effect—

1. Of settling all questions between the Company and the Government amicably.

2. Of clearing the Company of all debt and difficulties, so as to preserve to the public the fullest benefits to be derived from the road, and

3. Of providing a swift, commodious, and reliable means of communication between St. John and Halifax.

In conclusion, I have to add that I have submitted the proposition to the Governments of Nova Scotia and New Brunswick, and I beg you to submit this letter for the early consideration of the Hon. the Minister administering the Public Works Department in the absence of the Hon. the Minister of Public Works.

I have the honor to be, Sir,
Your obedient servant,
(Signed) J. A, MANN,
Commissioner and Attorney of the Windsor and Annapolis Railway Company, (Limited).

F. Braun, Esq.,
Dept. Pub. Works, Ottawa.

(No. 2,965.)

HALIFAX, N. S.,
August 28th, 1871.

[Telegram.]

Sandford Fleming and Mann have agreed on running power between Halifax and Windsor Company, to give Dominion one-third gross receipts. Would there be any chance of Acting Minister recommending this at once, as Mann wants to leave. The promise of recommendation might answer without any Order in Council. It will be a pity to hang this up if it can be avoided.

(Signed,) F. HINCKS.

To F. Braun.

(No. 1,611.)

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, August 1st, 1871.

SIR,—I have the honor to acknowledge the receipt of your letter of the 26th July ult., and memorial on behalf of the Windsor and Annapolis Railway Company, praying for State relief in either one of the several ways therein specified.

With respect to the first of these modes, viz., to put in force certain powers of purchase conferred upon the Government by clauses 7, 8 and 10 of the Statutes of Nova Scotia, 28 Vic., Cap. 13, (1865) I am to inform you that the Government of Canada do not think it expedient under present circumstances to purchase the Windsor and Annapolis Railway.

The second proposition, which is to convey or transfer to the memorialists that portion of the Government Railways in Nova Scotia operating between Windsor and Waverley Junction cannot be entertained; for besides being in contradiction with the Railway policy sanctioned by Parliament, such consequence or transfer would be impossible without special legislation.

The propositions which involve grants of the public money, as compensation or otherwise, are also inadmissable; for which it does not appear that the Windsor and Annapolis Railway Company have under their charter any right to compensatien. There is no fund at the disposal of the Government of Canada for affording them relief.

Having reference to the 3rd mode of relief stated in the memorial, that "running

powers" be granted over the Government line at Halifax, including the use of stations and conveniences now or hereafter to be erected in Halifax, I have the honor to inform you that His Excellency the Governor General in Council has authorized the Minister of Public Works to make the traffic arrangements, including "running powers" mentioned in the charter of the Windsor and Annapolis Railway Company, and to appoint any officer or arbitrator for that purpose, required by the said charter, should it prove impossible to conclude the said traffic arrangements without arbitration.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) F. BRAUN,
Secretary.

J. A. Mann, Esq.,
Russell House, Ottawa.

(No. 1,639.

August 30th, 1871.

Sir George Cartier will recommend adoption of agreement so soon as Mr. Fleming's report is sent. Mr. Mann may leave.

(Signed,) F. BRAUN,
Secretary.

Sir Francis Hincks, Halifax.

(No. 1,647½.)

OTTAWA, September, 21st, 1871.

That so soon as Mr. Fleming has reported, matter will be submitted to Council, and that Mr. Fleming has received instructions to confer with him.

(Signed,) GEORGE ET. CARTIER,
Acting Minister of Public Works.

J. A. Mann, Esquire, Halifax.

(No. 1,648½.)

OTTAWA, September 4th, 1871.

You are under misapprehension. Fleming's report must be submitted for approval by Council; will leave this evening for Ottawa. Since your last visit to Ottawa, all due diligence was made in your railway matter. Government not responsible for any delay. Very sorry you have to delay your departure.

(Signed,) GEORGE ET. CARTIER,
Acting Minister of Public Works.

J. A. Mann, Esquire, Halifax.

(No. 2,999.)

HALIFAX, N.S. *vid* OTTAWA,
September 1st, 1871.

[Telegram.]

It appears that no one has any authority to arrange running powers with me. Pray instruct Fleming. I am very anxious, too anxious, not to waste any more time here.

(Signed) J. A. MANN.

To Sir G. E. Cartier, Montreal.

(No. 1,654.)

September 8th, 1871.

As suggested in your telegram to Sir Francis Hincks, Taylor is instructed to come here.

(Signed,) F. BRAUN,
Secretary.

Sandford Fleming, Esq., Halifax.

(No. 3,002.)

HALIFAX, N.S., Sept. 4th, 1871.

[Telegram.]

Your telegram received. Fleming posted his report last Tuesday. I venture to hope that you will not think it necessary to delay the matter for the meeting of another Council. You informed me the Council had already empowered you to conclude arrangement. I have been here now more than two months, and am most anxious to get away by the steamer leaving on Saturday morning, not only for personal grounds, but also to enable me to make the necessary financial arrangements to give effect to the arrangement. Pray empower Fleming by telegraph to conclude the arrangement with me at once.

(Signed,) J. A. MANN.

To Sir George Cartier, Montreal.

(No. 3,011.)

HALIFAX, Sept. 5th, 1871.

[Telegram.]

I meet with no attention here, but plenty of frivolous objections. The line must be closed unless the Company get their rights. I leave for Ottawa to-morrow to make a last effort.

(Signed,) J. A. MANN.

To Sir George Cartier, Ottawa.

(No. 1,656.)

September 13th, 1871.

[Telegram.]

Your report concerning agreement with Mr. Mann not yet received. When may it be expected ?

(Signed,) F. BRAUN,
Secretary.

S. Fleming, Esq., Halifax.

(No. 3,026.)

WEST CHESTER, N.S., 14th Sept. 1871.

[Telegram.]

My report was prepared a week ago ; fear some bungling with mail : however, Taylor has copy ; he should reach Ottawa to-morrow. I am now going over Intercolonial. If Sir George wishes will go direct to Ottawa. leaving Shediac by steamer to-morrow. Answer to Amherst to-night.

(Signed,) SANDFORD FLEMING.

To F. Braum, Ottawa.

(No. 3,028.)

HALIFAX, N.S., Sept. 14th, 1871.

[Telegram.]

No concessions should be made to Mann, which are not well considered; mistakes may lead to great embarrassment here.

(Signed,) JOS. HOWE.

To Minister of Public Works, Ottawa.

(No. 3,030.)

INTERCOLONIAL RAILWAY,
OFFICE OF THE CHIEF ENGINEER,
HALIFAX, Sept. 7, 1871.

SIR,—I have the honor to reply to your communication of August 11th.

I received your letter on the 18th August. On that day I discovered that Mr. James A. Mann, the authorized agent of the Windsor and Annapolis Railway Company, was in this city. I immediately called upon him, and stated to him that the Acting Minister of Public Works had instructed me to examine and report what understanding and agreement could be arrived at concerning traffic arrangements, including "running powers" mentioned in the charter of said Company, and in agreement or contract dated the 22nd of November, 1866.

30, 1349, 1403, 1553, 2053, 2360, 2404, 2417, 2895, 2920, 1611, 1617 } Returned.

After some discussion with Mr. Mann, in presence of Mr. Taylor, Superintendent of the Nova Scotia Railways, he stated that the proposal made by him in clause 7 of a letter addressed to you, and dated August 1st, embraced the only terms which the Annapolis Railway Company would accept, and that unless they were granted by the Government, he would positively close the line within two weeks.

It became my duty to report this as the ultimatum of the agent of the Annapolis Railway Company, but I hesitated before doing so, in the hope that he would come to terms which the Government could concur in.

Subsequently, after repeated interviews, alternative proposals were discussed, and Mr. Mann drew up an agreement between the Government and his Company, which enclosed the modified terms which he said his Company would accept. I enclose this proposed agreement, marked A:

I considered it my duty to submit this document to the Superintendent, Mr. Taylor, before reporting to you, so that I might at the same time apprise you of his views respecting it.

Mr. Taylor offered very strong objections to many of the clauses, and as Mr. Mann has left the city for Ottawa, I considered it advisable to enter fully into the subject with Mr. Taylor, and endeavor to prepare an agreement which, while meeting Mr. Taylor's objections, would he fair and reasonable, and embrace all the essential points stipulated for by Mr. Mann in connection with "traffic arrangements" and "running powers" between Halifax and Windsor. See the enclosed paper, letter B.

In the latter document I have endeavored to arrange the terms proposed in plain language, free from all ambiguity, and I have discarded the clauses inserted by Mr. Mann for the exchange of rolling stock, and for the booking and transmission traffic by the Annapolis Company over the Intercolonial Railway. Both may be expedient in the course of time, but they do not appear to have any direct connection with the question of "running powers" between Windsor and Halifax, and as they only complicate the subject nuder discussion, it would be better to deal with them separately; there can be no possible urgency about arrangements for transmission of traffic over the Intercolonial Railway until that work be completed.

The only amount remaining to be referred to is the amount which should be paid by the Company to the Government for the use of the Windsor Branch and the Trunk Line.

Mr. Mann proposes one-third of gross earnings; this, I apprehend, with good management, would be sufficient to meet the expenditure to be undertaken by the Government in maintaining the railway and works, and in order to give the Company every reasonable assistance and advantage, it may be advisable to accept this for a year or two. I would therefore recommend an agreement to be entered into for, say three years—if at the end of that time the amount received by the Government appears inadequate, a revision of the agreement may be made on more equitable terms.

The agreement now proposed would, if adopted, give to the Annapolis Railway Company not only "running powers" into Halifax, to which they are entitled, but entire control of all the traffic of the District west of Halifax and the Trunk Line, with every opportunity of developing their business to the fullest possible extent.

I return the papers numbered on the margin.

I am, Sir,

Your obedient servant,

(Signed), SANDFORD FLEMING,
Chief Engineer,
Intercolonial Railway.

F. Braun, Esq.,
Secretary Public Works, Ottawa.

(Extract from No. 3,030.)

B.

Agreement between the Windsor and Annapolis Railway Company, Limited, and the Government of Canada.

1. The several expressions hereinafter referred to, shall when used in this agreement, have the signification and meaning following:—

Expression,—Signification or meaning.

The Company,—The Windsor and Annapolis Railway Company, Limited.

The Authorities,—The Department of the Government of Canada, which for the time-being, shall have the command or control of the Nova Scotia Railway.

The Trunk line,—So much of the Nova Scotia Railway with the branches, appurtenances, buildings and conveniences thereto belonging or attached, as lies between the terminus at Halifax and the Windsor Junction (both inclusive), together with any extensions into Halifax hereafter to be made.

The Windsor Branch,—So much of the Nova Scotia Railway with the branches, buildings and appurtenances and other conveniences thereto belonging or attached, as lies between the said Windsor Junction and the Junction of such Railway with the Windsor and Annapolis Railway, at or near Windsor.

The Superintendent,—The Superintendent or other Officer for the time being, managing the Windsor and Annapolis Railway.

The Manager,—The General Manager or other Officer for the time being, managing the Windsor and Annapolis Railway.

2. The Company shall, except for the purposes of the authorities in maintaining the railway and works, have the exclusive use of the Windsor Branch, with all station accommodation, engine sheds and other conveniences (but not including rolling stock and tools for repairs), now in use thereon.

3. The Company shall also use, to the extent required for its traffic, the Trunk Line with the station accommodation thereon, including engine shed. accommodation for five engines. water supply, fuel stages, turn tables, signals, telegraphs, wharves, sidings and other conveniences, but not including machine shops and other shops, buildings and appliances for repairs of rolling stock.

4. The Company shall run every day, Sundays excepted, between Halifax and Windsor, not less than two trains each way carrying passengers, and shall adopt the same

tolls as at present levied, or such other tolls as may from time to time be approved of by the Governor in Council, and shall furnish and maintain its own rolling stock.

5. The authorities shall maintain in workable condition the Windsor Branch and the Trunk Line, including all the station accommodation and other conveniences thereon.

6. The Company shall on the Windsor Branch employ their own station agents, booking clerks, watchmen, porters, signalmen, switchmen, and other servants for the management of the traffic.

7. The authorities shall, on the Trunk Line, employ all station agents, booking clerks, watchmen, signalmen, switchmen and other servants, not provided by the Company under clause 17.

8. The Company shall not, except with the concurrence of the authorities, carry any local traffic between stations on the Trunk Line ; but if so carried, they shall charge the same tolls as may be charged by the authorities.

9. The Company shall keep and render to the superintendent, an exact detail account of all the traffic carried by them over the Windsor Branch and the Trunk Line.

10. The Company shall pay to the authorities monthly, one third of the gross earnings from all traffic carried by them over the Windsor Branch and the Trunk Line.

11. All accounts between the authorities and the Company under this agreement, shall be adjusted regularly at the end of each calendar month, and the balance struck and paid over in cash not later than twenty-one days after the end of each month.

12. The authorities and the Company, respectively, shall at all reasonable times have access to and be allowed to inspect all such books, papers and vouchers in the possession of the other of them as have reference to the accounts between them.

13. All regular trains on the Windsor Branch and Trunk Line, shall be run in the usual way by time table, which time table shall, in respect to the Trunk Line, be prepared by the Superintendent, on consultation with the Manager. The Superintendent shall arrange for the arrival and departure of the trains of the Company, at the times desired by the Manager or as near thereto as practicable, and in this respect and in every other respect, the Superintendent, the Officers and servants of the authorities, shall conduct the business and work the traffic of the Company, and of the authorities with perfect impartiality and fairness.

14. With respect to *special* and *irregular trains*, in order to ensure public safety, the Company shall use the Trunk Line in strict accordance with such rules and regulations as are now in use, or as may hereafter be adopted and inforced by the Superintendent ; similar rules shall also be adopted and enforced by the Manager on the Windsor Branch, as far as necessary, for the guidance of officers and men engaged in maintenance of the railway.

15. The speed of the Company' strains on the Trunk Line and Windsor Branch, shall not exceed the speed adopted by similar, on the Government Railways in Nova Scotia.

16. The station agents and other servants of the authorities at Windsor Junction, shall receive, and as far as practicable, carry out the instructions of the Manager in regard to the arrival and departure and working of the Company's trains from or to the Windsor Branch, and he or they shall record in a book, to be kept for that purpose, the numbers and particulars of all engines, carriages, trucks, cars or other vehicles passing through such Junction, and shall make a return of the same daily to their respective owners.

17. The Company shall employ on the Trunk Line their own booking clerks, carting agents, carting staff or such other staff as they may deem necessary for the booking, collecting, checking, invoicing, receiving, delivering or forwarding their own traffic ; and the authorities shall, so far as practicable, provide suitable and convenient accommodation for such servants, and for the accommodation of such business.

18. The Company in using the Trunk Line, shall at all times observe the regulations and by-laws for the time being in force thereon, and the authorities in using the Windsor Branch tor the purpose of repairing and maintaining it, shall at all times observe the regulations and by-laws for the time being in force thereon.

19. In the event of Company failing to operate the railway between Halifax and

Annapolis, then this agreement shall terminate, and the authorities may immediately proceed to operate the railway between Halifax and Windsor, as they may deem proper and expedient.

20. The termination of this agreement under the preceding clause, is not to prejudice any rights which the Company may now have.

21. This agreement shall take effect on the first day of January, 1872, and continne for twenty-one years, and be then renewed on the same conditions or such other conditions as may be mutually agreed to.

The above agreement as to running power approved, subject to the insertion of the words "thirty per cent." in lieu of "one third," in clause 1.

Windsor and Annapolis Railway Company suit, pro. their attorney and Commissioner.

(Signed,) J. ALEX. MANN.

The above is the proposed agreement marked "B" in my report, dated 7th September, to Secretary Public Works, amended in consultation with Mr. Carvell, as a compromise to meet objections urged by Mr. Mann, and now submitted for the consideration of the Government.

(Signed,) SANDFORD FLEMING,
Chief Engineer, Intercolonial Railway.

OTTAWA, 21st September, 1871.

To compromise the differences between "the Company" and "the authorities," I can see no reason why the foregoing agreement should not be sanctioned. It may involve additional traffic accommodation at Halifax, but that would probably have soon to be provided in any case.

(Signed,) L. CARVELL,
General Superintendent, Government Railway
in New Brunswick.

OTTAWA, 21st September, 1871.

(No. 1,667.)

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, September 16, 1871.

SIR,—I am directed to enclose herewith for your information, copy of an agreement between the Windsor and Annapolis Railway Company, Limited, and the Government ot Canada, concerning "running powers," &c., prepared by Sandford Fleming, Esquire, and submitted for the consideration of the Minister of Public Works.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) F. BRAUN,
Secretary.

James A Manr., Esquire,
Agent Windsor and Annapolis Railroad,
Ottawa.

(No. 3,030.)

OTTAWA, 18th September, 1871.

SIR,—I have the honor to acknowledge receipt of your letter, of date 16th instant, covering draft of running powers agreement prepared by Sanford Fleming, Esq., and submitted for the consideration of the Honorable the Minister of Public Works.

It is matter of surprise to me that after having met Mr. Fleming upon the Company's draft agreement, and having practically conceded all the alterations therein stipulated for by him, I should now be called upon to consider an entirely new form of agreement.

I have, however, given the new form of agreement my prompt consideration, and although it is not to my mind either too explicit or too complete as the original draft submitted on behalf of the Company, yet, being anxious to bring this protracted negotiation to an end, I am willing to approve of it, subject to the alterations made by me in red ink upon the copy herein enclosed, and to the following observations.

I observe that the clauses which were inserted in the original draft as to the exchange of rolling stock and as to the interchange of traffic at Waverley Junction have been left. As to the first of these, I would remark that such a clause, although rather permissive than compulsory, is designed for mutual benefit. But apart from this consideration, it is possible that it might be a convenience to the Company to be allowed for a limited period to hire some of the Government Stock, which will, under the proposed arrangement, be released from the working of the Windsor Branch. As to the second, I shall be glad to hear that the Government will be prepared to enter at the consideration of a separate agreement for the interchange of traffic at Waverley Junction. This is essential for the development of the traffic of the two lines and for the convenience of the public.

Among the objections which were raised by Mr. Taylor, the Superintendent of the Nova Scotia Railways, was one which has not been provided for in the new form of agreement. I allude to the complications to arise if the Government servants work and manage the Company's traffic at some of the stations on the Trunk Line. As referring this objection for the consideration of the manager and the accountant of the Company, I find that they concur in it. In order to alleviate this difficult, I am willing to agree that the Company shall find them our booking clerks and carting staff, and attend to their own traffic at all the stations, provided a suitable concession be made in the toll to be paid by the Company ; and the concession I ask is the reduction of the 33 per cent., or one third of the gross receipts, to an even 30 per cent, and I have inserted the necessary alterations in the agreement with this view.

It is very important to me and to the Company that there should not be any further delay in the settlement of this matter, and I hope, therefore, that the agreement as now altered may be completed forthwith.

I have the honor to be, Sir,

Your obedient servant,

(Signed,) J. A. MANN.

F. Braun, Esquire,
Secretary Public Works Department, Ottawa.

Agreement between the Windsor and Annapolis Railway Company, Limited, and the Government of Canada.

1. The several expressions hereinafter referred to, shall when used in this agreement, have the signification and meaning following :—

The Company,—The Windsor and Annapolis Railway Company, Limited.

The Authorities,—The Department of the Government of Canada, which for the time being, shall have the command or control of the Nova Scotia Railway.

The Trunk Line,—So much of the Nova Scotia Railways, with the branches, appurtenances, buildings and conveniences thereto belonging attached, as lies between the

terminus at Halifax and the Windsor Junction (both inclusive), together with any extensions into Halifax hereafter to be made.

The Windsor Branch,—So much of the Nova Scotia Railway, with the branches, buildings, appurtenances, and conveniences thereto belonging or attached as lies between the said Windsor Junction and the junction of such railway with the Windsor and Annapolis Railway, at or near Windsor.

The Superintendent,—The Superintendent or other officer, for the time being, managing the Nova Scotia railways.

The Manager,—The General Manager or other officer, for the time being, managing the Windsor and Annapolis Railway.

2. The Company shall, except for the purposes of the authorities in maintaining the railway and works, have the exclusive use of the Windsor branch, with all station accomodation, engine sheds, and all other conveniences, but not including rolling stock and tools for repairs now in use thereon.

3. The Company shall also use, to the extent required for its traffic, the Trunk line, with the station accommodation thereon, including engine shed accomodation for five engines, water supply, fuel stages, turntables, signals, telegraphs, wharves, sidings, and other conveniences, but not including machine shops and other shops, buildings and appliances for repairs of rolling stock.

4. The Company shall run each week-day, between Halifax and Windsor, not less than two trains each way, carrying passengers, and shall adopt the same tolls as at present levied, or such other tolls as may from time to time be approved of by the Governor in Council, and shall furnish and maintain its own rolling stock.

5. The authorities shall maintain in good working condition the Windsor branch and the branch line, including all the station accommodation and other conveniences thereon.

6. The Company shall, on the Windsor branch, employ their own station agents, booking clerks, watchmen, porters, signalmen, switchmen, and other servants for the management of the traffic.

7. The authorities shall, on the Trunk line, employ all agents, watchmen, signalmen, switchmen, and other servants.

8. The Company shall not, except with the concurrence of the authorities, carry traffic between the stations on the Trunk line, but if so carried, they shall charge the the same tolls as may be charged by the authorities.

9. The Company shall keep and render to the Superintendent an exact detail account of all traffic carried by them over the Windsor branch and the Trunk line.

10. The Company shall pay to the authorities monthly, thirty per cent. of the gross tolls, inclusive of those from local traffic (if any referred to in clause 8) from all traffic carried by them over the Windsor branch and the Trunk line.

11. All accounts between the authorities and the Company under this arrangement shall be adjusted regularly at the end of each calendar month, and the balance struck and paid over in cash not later than twenty-one days after the end of each month.

12. The authorities and the Company respectively, shall, at all reasonable times, have access to and be allowed to inspect all such books, papers and vouchers in the possession of the other of them as have reference to the accounts between them.

13. All regular trains on the Trunk line shall be run in the usual way, by time table, which time table shall be prepared by the superintendent on consultation with the manager. The superintendent shall arrange for the arrival and departure of the trains of the Company at the times desired by the manager, or as near thereto as practicable, and in this respect and in every other respect, the superintendent, the officers and servants of the authorities, shall conduct the business, and work the traffic, as between the Company and the authorities, with perfect impartiality and fairness.

15. The speed of the Company's trains on the Trunk line shall not exceed the speed adopted by similar trains worked by the authorities therein.

16. The station agents and other servants of the authorities at Windsor Junction shall receive, and as far as practicable, carry out the instructions of the manager in regard

to the arrival and departure and working of the Company's trains from or to the Windsor branch, and he or they shall record in a book to be kept for that purpose, the numbers and particulars of all engines, carriages, trucks, cars, or other vehicles passing through such junction, and shall make a return of the same daily to their respective owners.

17. The Company shall, on the Trunk line, employ their own booking clerks, carting agents, carting staff, or such other staff as they may deem necessary for the booking, collecting, checking invocing, receiving, delivering or forwarding their own traffic, and such services shall be performed by the Company's servants in respect to the Company's traffic, and the authorities shall, so far as practicable, provide suitable and convenient accommodation for such servants and for the accommodation of such business.

18. The Company, in using the Trunk line, shall at all times observe the regulations and bye-laws for the time being in force thereon, and the authorities in using the bounds or branch for the purpose of repairing and maintaining it shall at all times observe the regulations and bye-laws for the time being in force thereon.

19. In the event of the Company failing to run the trains between Halifax and Windsor, in accordance with clause 4 of this agreement, then this agreement shall terminate, and the authorities may immediately proceed to operate the railway between Halifax and Windsor as they may deem proper and expedient.

20. This agreement shall take effect on the first day of January, 1872.

(No. 1,672.)

DEPARTMENT OF PUBLIC WORKS,

OTTAWA, September 20th, 1871.

SIR,—I am directed to submit for, your consideration and report, the accompanying communication from James A. Mann, Esq., in reference to your proposed agreement concerning "running powers," with his remarks thereon.

I have the honor to be, Sir,
Your obedient Servant,
(Signed,) F. BRAUN,
Secretary.

Sandford Fleming, Esq., Engineer-in-Chief,
Intercolonial Railroad Company,
Ottawa.

(No. 1673.)

DEPARTMENT OF PUBLIC WORKS,

OTTAWA, September 21st, 1871.

Memorandum :

The undersigned, acting in the absence of the Honorable the Minister of Public Works, has the honor to report :—

That, on the twenty-eighth day of July last, a Minute of Council was passed, authorizing the Minister of Public Works to make with the Windsor and Annapolis Railway Company (Limited), the traffic arrangements, including "running powers" over the Government Railway in the Province of Nova Scotia, mentioned in the Charter of the said Company for that purpose, to appoint any officer or arbitrator required by the said Charter, should the Minister of Public Works and the company be unable to come to an agreement without arbitration.

That on the eleventh day of August, ultimo, with the view of effecting the object of the said minute of Council, the undersigned appointed and deputed Sandford Fleming,

Esq., Chief Engineer, of the Intercolonial Railway, to confer with the said Windsor and Annapolis Railway Company, or with its authorized agent, and to report what understanding and agreement could be arrived at under authority of the said Minute of Council.

That Mr. Fleming has met and conferred with James Alexander Mann, Esq., Commissioner and Attorney, on behalf of the said railway company, and with the concurrence of Lewis Carvell, Esq., Manager of the European and North American Railway, and of the said Commissioner and Attorney, now reports and approves the articles of agreements hereunto annexed.

The undersigned has the honor to recommend that the said articles of agreements hereunto appended, be approved, and ratified by Your Excellency in Council.

Respectfully submitted.

(Signed) GEORGE E. CARTIER,
Acting Minister of Public Works.

Agreement between the Windsor and Annapolis Railway Company, Limited, and the Government of Canada :—

1. The several expressions hereinafter referred to shall, when used in this agreement have the signification and meaning following.

Expressions,—Signification or meaning.

The Company,—The Windsor and Annapolis Railway Company, Limited.

The Authorities,—The Department of the Government of Canada, which, for the time being,shall have the command or control of the Nova Scotia Railways.

The Trunk Line,—So much of the Nova Scotia Railways, with the branches, appurtenances, buildings, and conveniences thereto belonging or attached, as lies between the terminus at Halifax and the Windsor Junction (both inclusive), together with any extension into Halifax hereafter to be made.

The Windsor Branch, —So much of the Nova Scotia (with the branches), buildings, appurtenances and other conveniences thereto belonging or attached, as lies between the said Windsor Junction and the Junction of such railway, with the Windsor and Annapolis at or near Windsor.

The Superintendent,—The Superintendent or other officer for the time being managing the Nova Scotia Railway.

The Manager,—The General Manager or other officer for the time being managing the Windsor and Annapolis Railway.

2. The Company shall, except for the purpose of the authorities in maintaining the railway and works, have the extensive use of the Windsor Branch with all station accommodation, and engine sheds, and other conveniences, but not including rolling stock and tools for repairs now in use therein.

3. The Company shall also use, to the extent required for the traffic, the Trunk Line, with the station accommodation thereon, including engine shed, accommodations for five engines, water supply, fuel stages, turn-tables, signals, telegraphs, wharves, sidings and other conveniences, but not including machine-shops and other shops, buildings, and appliances for repairs of rolling stocks.

4. The Company shall run every day, Sundays excepted, between Halifax and Windsor not less than two trains, each carrying passengers, and shall adopt the same tolls as at present levied, or such other tolls as may from time to time be approved of by the Governor in Council, and shall furnish and maintain its own rolling stock.

5. That authorities shall maintain in workable condition the Windsor Branch and Trunk Line, including all the station accommodation and other conveniences thereon.

6. The company shall, on the Windsor Branch, employ their own station agents, booking-clerks, watchmen, porters, signalmen, switchmen, and other servants for the management of the traffic.

7. The authorities shall, in the Trunk Line, employ all station agents, booking-clerks, watchmen, signalmen, switchmen, and other servants not provided by the Company under clause 17.

8. The Company shall not, except with the concurrence of the authorities, carry any local traffic between stations on the Trunk Line, but if so carried, they shall charge the same tolls as may be charged by the authorities.

9. The Company shall keep and render to the Superintendent an exact detail amount of all traffic carried by them over the Windsor Branch and the Trunk Line.

10. The Company shall pay to the authorities monthly one-third of the gross earnings from all traffic carried by them over the Windsor Branch and the Trunk Line.

11. All accounts between the authorities and the company under this arrangement shall be adjusted regularly at the end of each calendar month, and the balance struck and paid over in cash not later than twenty-one days after the end of each month.

12. The authorities and the Company respectively, shall, at all reasonable times, have access to and be allowed to inspect all such books, papers and vouchers in the possession of the other of them as have reference to the accounts between them.

13. All regular trains on the Windsor Branch and Trunk Line shall be run in the usual way by time-table, which time-table shall, in respect to the Trunk Line, be prepared by the superintendent on consultation with the manager. The superintendent shall arrange for the arrival and departure of the trains of the Company at the times desired by the manager, or as near thereto as practicable and in this respect and in every other respect the superintendent, the officers and servants of the authorities shall conduct the business, and work the traffic of the Company and of the authorities with perfect impartiality and fairness.

14. With respect to special and irregular trains in order to ensure public safety the company shall use the Trunk Line in strict accordance with such Rules and Regulations as are now in use or as may hereafter be adopted and enforced by the superintendent, similar rules shall also be adopted and enforced by the manager on the Windsor Branch so far as is necessary for the guidance of officers and men engaged in maintenance of the, railway.

15. The speed on the Company's trains on the Trunk Line and Windsor Branch shall not exceed the speed adopted by similar trains on the Government Railways in Nova Scotia.

16. The station agents and other servants of the authorities at Windsor Junction shall receive, and as far as practicable, carry out the instructions of the manager in regard to the arrival and departure and working of the Company's trains from or to the Windsor Branch, and he or they shall record in a book to be kept for that purpose the numbers and particulars of all engines, carriages, trunks, cars or other vehicles passing through such junction, and shall make a return of the same daily to their respective owners.

17. The Company shall employ, on the Trunk Line, their own booking clerks, carting agents, carting staff, or such other staff, as they may deem necessary for the booking, collecting, checking, invoicing, receiving, delivering or forwarding their own traffic, and the authorities shall, so far as practicable, provide suitable and convenient accommodation for such servants, and for the accommodation of such business.

18. The Company, in using the Trunk Line, shall at all times observe the regulations and by-laws for the time being in force thereon, and the authorities in using the Windsor Branch for the purposes of repairing and maintaining it shall at all times observe the regulations and by-laws for the time being in force thereon.

19. In the event of the Company failing to operate the railway between Halifax and Annapolis, then this agreement shall terminate, and the authorities may immediately proceed to operate the railway between Halifax and Windsor as they may deem proper and expedient.

20. The termination of this agreement under the preceding clause is not to prejudice any right which the Company may now have.

21. This agreement will take effect on the first day of January 1872, and continue for twenty-one years, and be then renewed on the same conditions or such other conditions as may be mutually agreed to.

(No. 3,044.)

OTTAWA, 21st September, 1871.

SIR,—As arranged with the Honorable the Minister of Militia at his interview with Mr. Sandford Fleming and myself yesterday, I write to request that when the Council consider the proposed running powers, agreement to-day, their attention may be called to the application which I made in my letter to you, of the eighteenth instant, namely, that the Government should reduce the toll to be paid by the Company to thirty per cent of the gross receipts, in consideration of the Company agreeing to find their own booking clerks and carting staff for all purposes of their own traffic at the stations between Halifax and the Windsor junction.

Assuming that the Council will see fit to make this small concession of toll, so as to allow the Company to depelop their traffic, as well as to save all complication of accounts, the Clauses seven and seventeen will then stand :—

Clause 7,—"The authorities shall, on the Trunk Line, employ all station agents, watchmen, porters, signalmen switchmen, and other servants."

Clause 17,—" The Company shall, on the Trunk Line, employ their own booking clerks, carting agents, carting staff, or such other staff as they may deem necessary for the booking, collecting, checking, invoicing, receiving, delivering, and forwarding their own traffic, and such services &c., &c.,

I am not sure that Mr Fleming, in the hurry of leaving, amended Clause 20, as agreed with the Honorable the Minister of Militia—it should read thus:—

"This Agreement shall take effect on the first day of January 1872, and continue for twenty-one years, and be then renewed on the same conditions or such other conditions as may be mutually agreed."

I do most sincerly hope that the Council will dispose of this matter so that the Agreement may be completed to day.

I have the honor to be, Sir,
Your obedient Servant,
(Signed,) J. A MANN.

F. Braun, Esquire, Secretary,
Public Works Department.

(No. 3,045.)

RUSSELL HOUSE,
14th September, 1871.

DEAR SIR GEORGE,—There is some unaccountable fatality about the arrangements connected with my business. Mr. Fleming, as I understood, telegraphed that he had despatched his Report on the 6th, yet even now it is not to hand, notwithstanding that I have received two mails from Halifax posted subsequently to that date.

Mr. Taylor will, I suppose, be here in the morning. May I ask that you will to save time, which to me is now very precious, give instructions that Mr. Taylor meet me at once on his arrival, with a view to arrive at some understanding which he *will* approve of.

If there be any likelihood of a Council not being available on Saturday, could you not take the necessary powers now, to enable you to dispose of my business on that day? It is very important I should get away on Monday to make my arrangements previous to my departure for England.

Yours faithfully,
(Signed), J. A. MANN.

(No. 3,045.)

Agreement proposed to be made between the Windsor and Annapolis Railway Company, Limited, and the Government of Canada.

Interpretation Clause 1. The several expressions hereinafter referred to shall, when used in this agreement, have the signification and meaning following :—

Expression,—Signification or meaning.

The Company,—The Windsor and Annapolis Railway Company, Limited.

The Authorities,—The Department of the Government of Canada, which for the time being shall have the command or control of the Nova Scotia and Intercolonial Railways.

The Common Lines,—So much of the Nova Scotia Railway, with the branches, buildings, appurtenances, and conveniences thereto belonging or attached, as lies between the terminus at Halifax and the Waverley Junction (both inclusive), together with any extensions or alterations thereof hereafter to be made.

The Windsor Branch,—So much of the Nova Scotia Railway, with the branches, buildings, appurtenances and other conveniences thereto belonging or attached, as lies between the said Waverley Junction and the Junction of such Railway with the Windsor and Annapolis Railway at or near Windsor, together with all extensions or alterations thereof hereafter to be made.

The Intercolonial Line,—All railways other than the common line and Windsor branch before mentioned, as shall have a continuous rail from the beforementioned Windsor Junction, and which are now or may hereafter be owned by the Government of Canada.

The Annapolis Line,—The railway now owned by the Windsor and Annapolis Railway Company, Limited, and lying between the Junction thereof with the Nova Scotia Railway at or near Windsor and Annapolis, together with any alterations or extensions thereof hereafter to be made.

The Superintendent,—The Superindendent or other officer for the time being managing the Nova Scotia Railways.

The Manager,—The General Manager or other officer for the time being, managing the Windsor and Annapolis Railway.

2. This agreement shall commence and take effect from the day of one thousand eight hundred

3. The Company may run and work over and use the Windsor Branch and the common line, and such powers shall extend to and be exerciseable by, with, and for the engines, carriages, trucks, cars, officers and servants of the Company, and to and for traffic of every description, and shall comprise the use of stations, booking offices, platforms, approaches, water supply, engine shed accommodation (for not exceeding five engines on the common line), coal and fuel stages, turn-tables, signals, signal posts, telegraphs, wharves, sidings, works and conveniences, excepting repairing shops belonging to or connected with such lines. Provided, nevertheless, that the Company shall not run trains exclusively for the accommodation of local traffic arising at and destined for places on the common line ; and so long as the Company continue to work over the Windsor Branch, the authorities shall not, except for the purposes of ballasting or repair of such Branch, run their trains over such Windsor Branch.

4. The Company may demand and take the same tolls for the use of the Windsor Branch and of the common line, and for the use of carriages, trucks, cars, and locomotive power supplied by them for use thereon, as they do now or shall hereafter charge for the like user or service upon the Annapolis Railway. Provided, that the Company shall not, in respect of any local traffic as aforesaid carried by them in their through trains upon the common line, demand or take a smaller toll than that charged by the authorities to the public for a like user upon such line. Provided, nevertheless, that the Company shall not be bound to charge a higher toll or charge upon any traffic than that charged to the public by the authorities on the common line or on the Intercolonial Line.

5. Excepting as hereinotherwise provided, the common line shall be maintained, controlled, and worked exclusively by the authorities, and the station agents, booking clerks, and other servants of the authorities shall book, check, collect, invoice, receive, deliver, and forward and perform all other services in connection with all traffic thereon. The booking clerks or other authorized servants shall keep, and render to the manager, separate accounts of all monies received by them on account of the Company, and shall transmit the monies so received daily to the manager. The manager shall also, at least six days before the termination of each calender month, or in case of special trains at such time or times as may be practicable, supply to the superintendent a list of the times at which the Company desire their trains to arrive and depart from each station. The superintendent shall thereupon arrange for the arrival and departure of the trains, at the desired times, or as near thereto as practicable—and in this and every other respect, the superintendent, the officers and servants of the authorities, shall conduct the business and work the traffic of the Company and of the authorities with perfect impartiality and fairness.

Provided, nevertheless, that the station agents or other servant or servants of the authorities at the Waverley Junction shall receive, and, as far as practicable, carry out the instructions of the manager, in regard to the arrival and departure and working of the Company's trains from or to the Windsor Branch—and he or they shall record in a book, to be kept for the purpose, the numbers and particulars of all engines, carriages, trucks, cars or other vehicles passing through such junction, and shall make a return daily to their respective owners. And provided further, that the Company may, by giving to the superintendent one month's notice in writing, of their intention to do so, employ at any station or stations, depot, or terminus on the common line, their own booking clerks, carting agents, carting staff, or such other staff as they may deem necessary for the booking, collecting, checking, invoicing, receiving, delivering and forwarding their own traffic; and after the time specified in such notice, such services shall be performed by the Company's servants in respect of the Company's traffic—and the authorities shall, so far as practicable, provide suitable and convenient accommodation for such servants, and for the accommodation of such business.

6. The Windsor Branch, including all the permanent way, fences, earth-works, cuttings, embankments, culverts, bridges, stations, booking offices, buildings, platforms, approaches, water, engines, engine sheds, stages, turn-tables, signals, signal posts, telegraphs, wharves, sidings, and all other works or conveniences thereon, shall be maintained in good working condition by the authorities. But except as to the maintenance aforesaid, the said branch shall so long as the Company continue to run their trains over it, be worked and controlled exclusively by the Company, who shall find their own station agents, booking clerks, watchmen, porters, signalmen, switchmen, and other servants for the management and conduct of the traffic.

7. The Company in using the common line, shall at all times observe the regulations and by-laws for the time being in force thereon. In the event of the Company desiring any such regulations or by-laws to be inapplicable to them, or unreasonable, the question between the Company and the authorities as to the application or reasonableness of any such regulation or by-law shall, if not adjusted between the superintendent and manager, be settled by arbitration in the manner hereinafter prescribed.

8. The authorities in using the Windsor Branch for the purpose of repairing and maintaining it, shall at all times observe the regulations and by-laws for the time being in force thereon. In the event of the authorities deeming any such regulations or by-laws to be inapplicable to them or unreasonable, the question between the authorities and the Company as to the application or reasonableness of any such regulation or by-law, the same shall, if not adjusted between the superintendent and manager, be settled by arbitration in the manner hereinafter prescribed.

9. The Company and the authorities shall mutually exchange carriages, trucks, cars and other rolling stock—and, as between them the rates for the hire or use of such stock shall be, for passenger cars, three cents per loaded mile, and for freight cars, two cents

per loaded mile, and for other stock as may be arranged between the superintendent and the manager. But empty stock, going or returning, shall be free of charge either for hire or haulage, but empty stock shall be loaded back whenever freight offers for the line to which the stock belongs. Stock not returned to the owning line after two clear days to be charged for thereafter as for 100 miles per day.

10. The Company and the authorities shall afford to each other all proper and sufficient facilities for the interchange, at the Waverley Junction, of all traffic required to pass at such Junction, whether from the Intercolonial to the Windsor Branch or Annapolis Line, or from the Annapolis or Windsor Branch to the Intercolonial Line, and, when requisite for such interchange of traffic, for the passage of locomotive engines, carriages, trucks and cars from one railway to the other, and no charge shall be made either by the Company or the authorities in respect of such interchange, or any service for the purpose.

11. The Company and the authorities respectively from time to time, shall afford all proper and sufficient facilities, including among other things, through tickets, through checking, through booking, through invoicing, and exchange of rolling stock, for the accommodation and transmission of, and shall properly and sufficiently accommodate and transmit all traffic which having passed over the Windsor Branch is tendered by the Company for transmission over the Intercolonial Line, or which having arisen on the Intercolonial Line, is tendered by the authorities for transmission on the Windsor Branch, or the Annapolis Line ; and also all traffic which is from time to time tendered, either by the Company or the authorities to, and in order to its being transmitted on, over or upon the railway of the other of them. But traffic arising at, or destined for the common line, and coming from or going to the Intercolonial Line, shall be carried by the authorities, and the traffic coming from or going to the Windsor Branch or the Annapolis Line, shall be carried by the Company.

12. All such facilities, accommodation and transmission of traffic shall be afforded by the Company and by the authorities respectively, subject to such reasonable rules and regulations, and on payment of such tolls and charges as the manager and superintendent may agree on by minutes of meeting, or, as failing agreement between them, shall be settled by arbitration as hereinafter provided. Provided always that in no case shall the company or the authorities charge to the other of them a higher toll or charge than the lowest charge made by them to the public for the like services.

13. The Company shall keep and render to the authorities once in every month, separate accounts of all tolls received by them from the public in respect of traffic passing over the Windsor Branch, the common line, or the Intercolonial Line respectively ; and in the case of through traffic ,such lines respectively shall, unless otherwise agreed, be credited with a mileage proportion of the through railway toll received by the Company from the public in respect of such through service. And the authorities shall keep and render to the Company once in every month' separate accounts of all tolls received by them from the public in respect of traffic passing over the Windsor branch and the Annapolis Line, and so far as carried by the Company on the common line respectively. And in the case of through traffic, such lines respectively shall, unless otherwise agreed, be credited with a mileage proportion of the through railway toll received by the authorities in respect of such through service.

14. For the user and services hereinbefore mentioned, the Company shall pay to the authorities monthly one-third of the gross tolls received by them from the public in respect of the traffic carried over the Windsor Branch and the common line, and such payments respectively shall be received in full satisfaction of all claims by the authorities in respect of such user and services.

15. Except as otherwise provided, the authorities and the Company respectively shall once in every month, adjust all accounts between them in respect of through traffic or otherwise.

16. The authorities and the Company respectively shall, at all reasonable times, have access to and be allowed to inspect all such books, papers and vouchers in the possession of the other of them as have reference to the accounts between them.

17. In case of any difference as to the construction of this agreement, or upon any matter under this agreement, such matter or matters in difference shall be referred to and be determined by two arbitrators to be appointed, the one by the authorities, the other by the Company, or failing agreement, by an umpire to be chosen by such arbitrators before entering into the subject matter in dispute. And in the event of the authorities or the company failing to appoint an arbitrator after one month's notice from the other of them of an arbitration being required, the one arbitrator appointed may proceed with such arbitration.

18. If at any time hereafter any difficulty or questions arise between the Company and the authorities as to the effect or operation of this agreement, whether by reason of altered circumstances, or any defect or omission in this agreement, such difficulty or questions shall be submitted to and settled by arbitration, in the same manner as prescribed in the next preceding clause.

(No. 3,046.) [Telegram.]

HALIFAX, NOVA SCOTIA, 6th Sept., 1871.

Taylor's objections to several clauses have much force in them when examined. I have prepared an agreement embracing all contemplated by Order in Council and essential points in Mann's agreement, which should meet the case. I think you should have Taylor at Ottawa, as he is familiar with whole subject. Will report by first mail.

(Signed,) SANDFORD FLEMING.

To Sir F. Hincks,
Ottawa.

(No. 3,047.)

PRIVY COUNCIL OFFICE,
OTTAWA, 21st September, 1871.

SIR,—I am directed to inform you that the Report of the Honorable the Acting Minister of Public Works, submitting for approval the articles of agreement between the Windsor and Annapolis Railway Company and the Government of Canada, has this day been passed by the Committee of the Privy Council, who have recommended that the said articles should be approved and sanctioned by His Excellency with the understanding that the alteration of thirty per cent instead of one-third, as suggested by Mr. Mann, should not be adopted.

The Report of the Committee will be submitted without delay for the approval of His Excellency.

I have the honor to be, Sir,
Your obedient servant,

(Signed,) WM. H. LEE,
Clerk, Privy Council.

T. Trudeau, Esq.,
Deputy Minister, Public Works.

(No. 1674.)

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, September 22nd, 1871.

SIR,—I have the honor to enclose herewith, for your information and guidance, a copy of an Order in Council passed on the 22nd instant, approving and sanctioning certain articles

of agreement thereunto annexed between the Government of Canada and Windsor and Annapolis Railway Company Limited, respecting "running powers" over the Government Railway in Nova Scotia.

I have the honor to be, Sir,
Your obedient servant.

(Signed,) F. BRAUN,
Secretary.

J. A. Mann, Esquire,
Commissioner and Attorney on behalf
of the W. & A. R. R. Co'y. Ottawa.

(No. 1,675.)

[Telegram.]

September, 22nd, 1871.

George Taylor, Esquire,
Halifax.

Agreement concerning "running powers" is passed, therefore you need not come.

(Signed,) F. BRAUN,
Secretary.

(No. 3,074.)

WINDSOR & ANNAPOLIS RAILWAY,
KENTVILLE, 2nd October, 1871.

SIR,—The running-powers agreement has too long been the all-engrossing subject of negotiation between the Windsor and Annapolis Railway Company and the Department of Public Works, that the other claims of the Company, although of only lesser importance, have not received the attention they have deserved. Now, however, that the running-powers have been settled, I trust these claims will receive attention, and I beg that they may be laid before His Excellency the Governor General in Council without further delay.

The claims preferred by the Company were enumerated in the third paragraph of my letter of 1st August last, and I am glad now to be able to repeat the proposition which I made on behalf of the Company in my letter of the 14th of the same month, viz: that the whole of the claims be submitted for the decision of independent arbitrators.

As I have already informed you, I am compelled to return in the next steamer to England, where I expect to be detained about three mouths; but assuming as I do, that the Government will forthwith concur in the equitable proposition made by the Company, I will, on hearing from you to that effect, arrange with the Company to appoint a representative on their behalf so that these vexed questions may be summarily and amicably disposed of.

I have to request you will address me in London to the care of

"The Windsor and Annapolis Railway Co.,
27 Great Winchester Street."

I have the honor to be, Sir,
Your obedient servant,

(Signed,) J. A. MANN,
Commissioner and Attorney of the,
Windsor and Annapolis Railway Co. Limited.

F. Braun, Esq., Secretary,
Public Works Department, Ottawa.

(No. 1,699.)

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, October 13th, 1871.

SIR,—I beg to acknowledge receipt of your letter of 2nd instant, respecting certain claims of the Windsor and Annapolis Railway Company, and to say in reply that the matter will be laid before the Minister without delay.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) F. BRAUN,
Secretary.

J. A. Mann, Esquire,
Care of the "Windsor and Annapolis Railway Company,"
27 Great Winchester Street, London, England.

(No. 3,204.)

WINDSOR AND ANNAPOLIS RAILWAY COMPANY, LIMITED,
27 GREAT WINCHESTER STREET, LONDON,
21st November, 1871.

SIR,—I am very much surprised to learn from the Manager of the Windsor and Annapolis Railway that the Government Superintendent at Halifax had not, at the date of our last advices, received instructions as to giving effect to the agreement entered into while I was at Ottawa.

As the preparations necessary to give effect to that agreement will absorb some time, I beg to urge you to give all requisite instructions without further loss of time.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) J. A. MANN,
Commissioner Windsor and Annapolis
Railway Company.

F. Braun, Esq., Secretary
Public Works Department, Ottawa.

(No. 1,751.)

PUBLIC WORKS,
OTTAWA, 7th December, 1871.

SIR,—I have the honor to inform you that J. A. Mann, Esquire, Commissioner and Attorney for the Windsor and Annapolis Railway Company has requested, in a letter addressed to this Department on the 1st of August last, that the decision arrived at by the Dominion Government in reference to certain claims of the above mentioned Railway Company may be re-considered.

I enclose a copy of said letter herewith, together with a copy of the Agreement executed by the Windsor and Annapolis Railway Company, and Provincial Government of Nova Scotia, on the 22nd of November, 1866, begging your attention to clause 9 of said agreement, and requesting you will be good enough to give the subject your consideration, and inform this Department of your final decision thereon.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) F. BRAUN,
Secretary.

The Honorable,
The Minister of Customs,
&c., &c., &c.

(No. 1,752.)

PUBLIC WORKS,
OTTAWA, 7th December, 1871.

SIR,—I have the honor to enclose herewith a letter from J. A. Mann, Esquire, Commissioner and Attorney of the Windsor and Annapolis Railway Company, addressed to this Department on the 1st of August last, and requesting that the decision arrived at by the Dominion Government in reference to certain clauses of the above mentioned Railway Company might be reconsidered.

I enclose also for reference a copy of the articles of agreements enclosed with by the Provincial Government of Nova Scotia, on the 22nd of November, 1866, with the Windsor and Annapolis Railway Company.

The Minister begs to direct your attention to clauses Nos. 3 and 4 of said agreements, and requests you will be good enough to give the contents of them your consideration, and inform the Department with your final decision thereon.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) F. BRAUN,
Secretary.

Honorable,
The Minister of Finance, Ottawa.

(No.1,753.)

PUBLIC WORKS,
OTTAWA, 7th December, 1871.

SIR,—I have the honor to enclose herewith the copy of a letter from J. A. Mann, Esq., Commissioner and Attorney for the Windsor and Annapolis Railway Company, addressed to this Department on the 1st of August last, and requesting that the decision arrived at by the Dominion Government in reference to certain claims of the above mentioned Railway Company might be re-considered.

I enclose also for reference, a copy of the articles of agreements entered into by the Provincial Government of Nova Scotia, on the 22nd of November, 1866, with the Windsor and Annapolis Railway Company.

The Minister requests you will be kind enough to give him your written opinion on the merits of the claims urged by Mr. Mann, as set forth in paragraphs 5, 6, 7, 8 and 9 of the enclosed letter.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) F. BRAUN,
Secretary.

The Hon. Minister of Justice.

(No. 3,217.)

[Telegram.]

TRURO, N. S., 11th December, 1871.

To F. Braun,

Pray suggest to the Minister that Taylor should have instructions at once about arrangement with Annapolis Railway, which, I think, takes effect on 1st January.

(Signed,) SANDFORD FLEMING.

(No. 3,226.)

Copy of a report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 22nd September, 1871 :—

On a memorandum dated 21st September, 1871, from the Hon. Sir George E. Cartier, acting in the absence of the Hon. the Minister of Public Works, reporting that on the

twenty-eighth day of July last, a Minute of Council was passed authorizing the Minister of Public Works to make with the Windsor and Annapolis Railway Company, Limited the traffic arrangements, including running powers, over the Government railway in the Province of Nova Scotia, mentioned in the charter of the said Company, and for that purpose to appoint any officer or arbitrator required by the charter, should the Minister of Public Works and the Company be unable to come to an arrangement without arbitration.

That, on the eleventh day of August ultimo, with the view of effecting the object of the said Minute of Council, he appointed and deputed Sandford Fleming, Esq., Chief Engineer of the Intercolonial Railway, to confer with the said Windsor and Annapolis Railway Company, or with its authorized agent, and to report what understanding and agreement could be arrived at under authority of the said Minute of Council.

That Mr. Fleming has met and conferred with James Alexander Mann, Esq., Commissioner and Attorney on behalf of the said Railway Company, and with the concurrence of Lewis Carvell, Esq., Manager of the European and North American Railway and of the said Commissioner and Attorney, and now reports and approves the articles of agreement hereunto annexed, which articles of agreement he, the Acting Minister of Public Works, submits for the approval of Your Excellency.

The Committee advise that the said articles of agreement herewith appended be approved and ratified by Your Excellency in Council, it being understood that the payment of one-third of the gross earnings be adhered to.

Certified.

(Signed,) Wm. H. Lee.
Clerk, Privy Council.

To the Honorable
The Minister of Public Works,
&c., &c., &c.

(Copied from No. 1,766.)

Department of Public Works,
Ottawa, December 20th, 1871.

Sir,—I have the honor to inform you that a copy of the agreement between the Windsor and Annapolis Railway Company and the Government in relation to "running powers" to take effect on the 1st January, 1872, has been sent to the superintendent of Nova Scotia Railway, with instruction to give effect to the same.

I have the honor to be, Sir,
Your obedient servant,

(Signed,) F. Braun,
Secretary.

J. A. Mann, Esq., Commissioner,
Windsor and Annapolis Railway Company,
24 Great Winchester Street, London, E.C.

(Copied from No. 1,767.)

Department of Public Works,
Ottawa, December 20th, 1871.

Sir,—I beg to enclose herewith copy of an agreement entered into between the Windsor and Annapolis Railway Company and the Government, in regard to "running

powers" to take effect on the 1st January, 1872, and to authorize you to make the necessary arrangements for the proper carrying out of the same.

I have the honor to be, Sir,
Your obedient Servant,
(Signed,) F. BRAUN,
Secretary.

G. Taylor, Esq.,
Superintendent Government Railway,
Halifax, N.S.

(Copy from No. 3,291.)

DOMINION OF CANADA, CUSTOMS DEPARTMENT,
OTTAWA, 29th December, 1871.

SIR,—I have the honor to acknowledge receipt of your letter of 7th instant, enclosing a communication from J. A. Mann, Esq., Commissioner and Attorney of the Windsor and Annapolis Railway Company, and copy of agreement between that Company and the Government of Nova Scotia of 22nd November, 1866, referring specially to clause 9 of said agreement, and requesting my decision thereon.

In reply. I have to inform you that, having given the claim in question my best consideration, and assuming that the copy furnished is a correct copy, I think the railway company entitled to a drawback of all duties actually paid by them on materials used in construction, or articles necessary for the working of the line, but all such refunded duties should constitute a charge by the Dominion Government against the Local Government of Nova Scotia.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) S. L. TILLEY,
Minister of Customs.

The Hon. H. L. Langevin, C.B.,
Minister of Public Works, Ottawa.

(Copied from No. 1,837.)

January 22nd, 1872.

George Taylor, Halifax:

Since the agreement with Windsor and Annapolis Railway, do Government trains from Halifax to junction and to Truro continue as before, and is the local traffic in passengers and freight between Halifax and Windsor attended to, and has it the same facilities as before the agreement? Answer immediately.

(Signed,) F. BRAUN,
Secretary.

(Copy of No. 3,350.)

(By telegraph from Richmond, N. S.)

OTTAWA, 22nd January, 1872.

Since the agreement with Windsor and Annapolis Railway Company Government Trains to Junction and to Truro run as before, the same number of trains carrying passengers are run by the Company between Halifax and Windsor as heretofore, but cannot say whether the Company have sufficient plant to move the freight traffic.

(Signed,) GEO. TAYLOR.

To F. Braun.

(Copied from No. 1,838.)

January 23rd, 1872.

Have Government trains stopped at same number of Stations as before agreement?

(Signed) F. Braun.
Secretary.

G. Taylor, Halifax.

(Copy of No. 3352.)

(By telegraph from Richmond, Nova Scotia.)

Ottawa, January 23rd, 1872.

Yes; Government trains stop at the same number of stations now as before the agreement; the same regulations as to stopping are pursued at present as have been observed for years.

(Signed,) Geo. Taylor.

To F. Braun, Esq.

(Copied from No. 1,872.)

Department of Public Works,
Ottawa, February 6th, 1872.

Sir,—I am directed to inform you that complaints are made that the Windsor and Annapolis Railway Company, in direct violation of its agreement with the Government, made in September last, is charging higher rates than those agreed upon. For instance, by the new tariff of 1st of January, 1872, hay is raised from the 3rd to the 2nd class, thereby increasing, by 60 cts. per ton, the rate of transport of that article from Windsor station to Halifax. The rates on horses and cattle are also stated as being increased; "horses and cattle" are not shewn in the tariff above referred to.

The Minister of Public Works desires that you would furnish him with a copy of the Company's Supplementary Tariff, and also that you will explain how these increases have been put into operation without the previous sanction and approval of the Governor General in Council, as provided by the agreement aforesaid.

I have the honor to be, Sir,
Your obedient servant,

(Signed,) F. Braun,
Secretary.

Vernon Smith, Esq.,
General Manager Windsor and Annapolis Railway,
Halifax, N. S.

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 22nd April, 1872 ;—For copies of all Correspondence between the Government, or any Member of the Government of the Dominion and the Governments, or any Member of the Governments of the Provinces of Quebec and Ontario, on the subject of the division of the surplus of the debt of the former Province of Canada between the Provinces of Quebec and Ontario; and on the subject of the arbitration which took place with regard to that division, and respecting the reference to the Privy Council of the questions which arose out of that Arbitration, together with copies of all Correspondence on the subject of applications made or suggestions offered by the Governments of either of those Provinces with regard to making the surplus of the debt of the former Province of Canada a charge on the Treasury of the Dominion, or for arranging in any other manner the difficulties to which that question has given rise, without referring them to the Privy Council; and lastly, for copies of all Correspondence with the Governments, or any Members of the Governments of the different Provinces of the Dominion, with respect to all applications made for the granting to such Provinces, or to any of them, of additional subsidies, or of more favourable financial terms than are granted to them by the Confederation Act.

By Command.

J. C. AIKINS,

Secretary of State

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 6th May, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing, the above Return is not Printed.*]

RETURN

To An Address of the House of Commons, dated 29th April 1872;—For Copies of all Correspondence or other documents relating to the School Act passed by the Local Legislature of New Brunswick, between the Dominion Government and that of New Brunswick; also Copies of all Correspondence and petitions addressed to the Government by the Roman Catholic portion of the population, complaining of the injustice of the School Act, which is repugnant to their religious opinions; the answers of the Government to such Correspondence and Petitions; also Copies of all Orders in Council and legal opinions of the Government with reference to the legality of the said School Act of New Brunswick.

By Command,

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 6th May, 1872.

To His Excellency The Right Honorable Baron Lisgar, K.G. C. B., Governor General of Canada, &c., &c., &c.:

The petition of the undersigned Catholics of Memramcook, Dorchester, Westmorland, in the Province of New Brunswick, humbly sheweth:—

That the Act relating to Common Schools passed at the late Session of the Local Legislature of this Province, if allowed to go into operation, will destroy or greatly diminish the educational privileges which the Catholics of this Province enjoyed at the time of the passing of the British North America Act and subsequently.

That under the School Law in force in this Province at the time of the passing of the British North America Act, and up to the present time, Catholics were enabled, wherever their numbers were sufficiently large, to establish Schools in which a good religious and secular education was afforded.

That in the cities and other centres of large populations, for the wants of which the law did not sufficiently provide, your Petitioners at a cost truly enormous when compared to their means, erected large and commodious buildings in which they established and maintained Graded Schools equal in all respects to any Primary Schools existing in these Provinces, and that they received legislative grants to aid in the maintenance of those schools. To these grants they may in most cases be fairly regarded as having a prescriptive right.

That in districts in which Catholics were too few in number to maintain Separate Schools they could not be compelled to contribute to the support of any schools in which they had reason to apprehend that anything would be done to sap the faith or weaken the religious convictions of their children; And that this afforded them a safeguard and protection which the Act lately passed will wholly destroy.

That the School Act of last Session was not asked for or desired by the people of this Province, but was passed through an undue influence brought to bear upon the members of the Legislature; several members of the Assembly—who when elected were known to be opposed to this measure—having by the use of that influence been induced to violate their pledges and disregard the well understood wishes of their constituents.

That when the Bill was before the Legislature, the Catholics, who are more than one-third of the entire population of the Province, asked by petition that the right enjoyed by the Protestant minority in the Province of Quebec, to establish Dissentient or Separate Schools, should be accorded to them, and that this was refused.

That in the Legislative Council, an amendment giving the right to establish Separate Schools was only lost on equal division.

That the Act of last Session provides that there shall be a compulsory rating and assessment for the support of schools in every County in the Province, in a fixed proportion to the number of inhabitants, and that no part of the money so raised, or of any money appropriated by the Provincial Government under this Act for educational purposes, shall be given to any school in which the education is religious.

That in the several school districts into which the counties are to be divided other sums are to be raised for school purposes, and the determination of the amount and of the mode of expenditure, the appointment of trustees and all that concerns the management of the Schools, are vested absolutely in the majority, thus, by process of law, depriving your petitioners. who, in most instances, are in the minority, of all rights and all the protection of law.

That if this Act be allowed to go into operation, your petitioners will be compelled to contribute to the support of a school system of which they conscientiously disapprove: And if they would not expose their children to what they regard as the most serious and alarming dangers they must maintain other schools at their own expense, thus paying twice while others pay but once; or when their numbers or means will not enable them to establish and maintain schools to which they can with safety send their children, they will be compelled to allow them to grow up in ignorance.

That this would be a most serious infringement upon the rights of your petitioners, a most serious deprivation of the educational privileges they have hitherto enjoyed, and a palpable violation of the spirit of the British North America Act.

Your petitioners therefore humbly pray that Your Excellency will be pleased to disallow the said Act.

Signed by, Revd. C. Lefebvre, S. S. C., and 537 others.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA. 24th January, 1872.

MY LORD, [Sir,]—

I am directed to enclose to Your Lordship [you] an extract from the report of the Minister of Justice on the numerous petitions from the Roman Catholics of New Brunswick, praying that the Act ch. 21, of the last session of the Legislature of New Brunswick, intituled, "An Act relating to Common Schools," be disallowed, and to inform Your Lordship [you] that the conclusions of the said report have been agreed to by His Excellency the Governor General in Council.

I have, &c.,
(Signed) E. PARENT, U.S.S.

To His Lordship The Bishop of Chatham,
Chatham, N.B.
To His Lordship the Bishop Sweeny,
St. John, N.B.
The Reverend James Quinn,
Catholic Pastor, St. Stephen, N.B.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 20th January, 1872.

The Committee of Council have had under consideration the annexed report, dated January 20th, 1872, from the Honorable the Minister of Justice, and for the reasons given therein they advise that the several Acts passed by the General Assembly of the Province of New Brunswick, in the month of May, 1871, in the 34th year of Her Majesty's Reign, be left to their operation, but that the attention of the Government of that Province be called to the three chapters to which exception is taken by the Minister of Justice, a copy of whose report they recommend be forwarded to the Lieutenant-Governor of New Brunswick, through the Secretary of State for the Provinces.

Certified,

(Signed) W. H. LEE,
Clerk Privy Council.

To the Honorable
The Secretary of State (Canada),
&c., &c., &c.

DEPARTMENT OF JUSTICE,
OTTAWA, January 20th, 1872.

The undersigned to whom was referred certified copies of the Acts of the General Assembly of the Province of New Brunswick passed in the month of May, 1871, in the 34th year of Her Majesty's Reign, has the honor to report:

That all the said Acts, excepting chapters 1 and 19, are free from objection, and he recommends that they be left to their operation.

With respect to Chapter 1, the 14th section of the Act is in excess of jurisdiction. It provides that the police magistrate of the City of Fredericton shall have power to do alone such acts as are required to be done by two or more justices of the peace.

This provision is general in its terms, and would be held, it is presumed, to authorize the police magistrate to act alone in criminal cases where the Statutes of the Dominion provides that two or more justices must act.

Such an enactment, though a very proper one, is beyond the competence of the Local Legislature, as it, in effect, repeals the provision in the Act of the General Legislature.

The attention of the Government of New Brunswick should be invited to this with the view of having the clause amended at the next Session. There will be no difficulty in obtaining a general Act from the Dominion Parliament providing that police and stipendiary magistrates should have the powers usually conferred on two or more justices.

It should also be noticed that the 2nd clause recites the title of the Act inaccurately, which error should be amended.

Chapter 19, "An Act to authorize the appointment of a District or Stipendiary Magistrate for the County of Gloucester," is objectionable for the same reason as above given respecting Chapter I.

With respect to *Chapter 6*, intituled "An Act in addition to an Act passed in the 33rd year of the reign of Her present Majesty, intituled "An Act to continue and amend an Act to regulate the sale of Spirituous Liquors," the undersigned thinks it well to remark that he entertains considerable doubt whether it and the Act which it amends are not in some respects *ultra vires*.

The 92nd section of the Union Act gives to Provincial Legislatures the exclusive power of making laws in relation to shop, saloon, tavern, auctioneer and other licences, in order to the raising of the revenue for provincial, local or municipal purposes.

The Acts in question however go further than making provision for the raising of

revenue by charging licence fees, they contain clauses placing restrictions on the issue of tavern licences, such restrictions having no connection with any revenue purpose.

Now by the Union Act the duty of all legislation relating to the regulation of trade and commerce is thrown upon the general legislature, and in the opinion of the undersigned the provisions in these Acts are in regulation of trade and do not concern the raising of revenue.

The undersigned recommends that the Act be left to its operation leaving it to any persons thinking themselves aggrieved by an action under these provincial statutes, to test their constitutionality in the courts. The attention of the Provincial Government should however be called to the matter as worthy of their consideration.

Numerous petitions to His Excellency the Governor General from the Roman Catholics of New Brunswick, most respectably signed, have been received praying that the Act chap. 21, intituled "An Act relating to common Schools," be disallowed.

The grounds upon which this prayer is based, are :—

1. That the Act will greatly destroy or greatly diminish the educational privileges which Catholics enjoyed at the time of the passing of the British North America Act, and and subsequently ;

2. That the pecuniary grants hitherto made to the Graded Schools have been taken away, although to these grants Catholics may in most cases be fairly regarded as having a prescriptive right.

Now the Provincial Legislatures have exclusive powers to make laws in relation to education, subject to the provisions of the 93rd clause of the British North America Act. Those provisions apply exclusively to the denominational, separate or dissentient schools ; they do not in any way affect or lessen the power of such Provincial Legislatures to pass laws respecting the general educational system of the Province.

The Act complained of, is an Act relating to common schools, and the Acts repealed by it apply to parish, grammar, superior and common schools. No reference is made in them to separate, dissentient or denominational schools, and the undersigned does not on examination find that any Statute of the Province exists establishing such special schools.

It may be that the Act in question may operate unfavorably on the Catholics or on other religious denominations and if so it is for such religious bodies to appeal to the Provincial Legislature which has the sole power to grant redress.

As, therefore, the Act applies to the whole school system of New Brunswick, and is not specially applicable to denominational schools, the Governor General has, in the opinion of the undersigned, no right to intervene.

As to the second objections respecting pecuniary grants, those must of course be under the annual supervision of the Legislature which has the sole power to deal with the public funds, ; unless, by special enactment, those grants have been conferred for a specified period by an Act of the Legislature.

In such case the grant might be considered in the nature of a contract and the repeal might be held to be a breach of that contract.

The undersigned does not find that any such statutory contract has been made. Under the circumstances he is therefore of opinion that no other course is open to the Governor General than to allow the Act to go into operation.

All which is respectfully submitted.

(Signed) JOHN A. MACDONALD

No. 54.

OFFICE OF THE SECRETARY OF STATE FOR THE PROVINCES.

OTTAWA, 29th January, 1872.

SIR,—I have the honor, by command of His Excellency the Governor General, to transmit to you, herewith, a copy of an Order of His Excellency in Council, and of the

No. 522.

report of the Honorable the Minister of Justice therein referred to, directing that the several Acts passed by the General Assembly of the Province of New Brunswick, in the month of May, 1871, in the 34th year of Her Majesty's Reign, be left to their operation.

22nd January, 1872.

I have, at the same time, to request that you will have the goodness to invite the attention of your Government to the three chapters to which exception is taken by the Minister of Justice in his Report.

20th January. 1872.

I have, &c.,

(Signed,) JOSEPH HOWE,
Secretary of State for the Provinces.

The Honorable
L. A. Wilmot, Lieutenant Governor,
Fredericton.

Copy of a Report of a Committee of the Honorable the Privy Council approved by His Excellency the Governor General in Council, on the 22nd January, 1872.

The Committee of Council have had under consideration the annexed report, dated January 20th, 1872, from the Honorable the Minister of Justice, and for the reasons given therein they advise that the several Acts passed by the General Assembly of the Province of New Brunswick, in the month of May, 1871, in the 34th year of Her Majesty's Reign, be left to their operation, but that the attention of the Government of that Province be called to the three chapters to which exception is taken by the Minister of Justice, a copy of whose report they recommend be forwarded to the Lieutenant-Governor of New Brunswick through the Secretary of State for the Provinces.

Certified.

(Signed,) WM. H. LEE,
Clerk, Privy Council.

To the Honorable
The Secretary of State for the
Provinces, &c., &c.

Extract of a Report of the Honorable the Minister of Justice, dated 20th January, 1872.

"Numerous petitions to His Excellency the Governor General from the Roman Catholics of New Brunswick, most respectably signed, have been received, praying that the Act, chap. 21, intituled "An Act relating to Common Schools" be disallowed.

The grounds upon which this prayer are based, are—

1. That the Act will greatly destroy or greatly diminish the educational privileges which Catholics enjoyed at the time of the passing of the British North America Act, and subsequently.

2. That the pecuniary grants hitherto made to the Graded Schools have been taken away, although to these grants Catholics may in most cases be fairly regarded as having a prescriptive right.

Now the Provincial Legislatures have exclusive powers to make Laws in relation to Education, subject to the provisions of the 93rd clause of the British North America Act. Those provisions apply exclusively to the Denominational, Separate, or Dissentient Schools, they do not in any way affect or lessen the power of such Provincial Legislatures to pass Laws respecting the General Educational System of the Province.

The Act complained of is an Act relating to Common Schools, and the Acts repealed by it apply to Parish, Grammar, Superior, and Common Schools.

No reference is made in them to Separate, Dissentient, or Denominational Schools,

and the undersigned does not, on examination, find that any Statute of the Province exists establishing such Special Schools.

It may be that the Act in question may operate unfavourably on the Catholics, or on other religious denominations, and if so, it is for such religious bodies to appeal to the Provincial Legislature, which has the sole power to grant redress.

As, therefore, the Act applies to the whole school system of New Brunswick, and is not specially applicable to denominational schools, the Governor General has, in the opinion of the undersigned, no right to intervene.

As to the second objection, respecting pecuniary grants, those must of course be under the annual supervision of the Legislature, which has the sole power to deal with the public funds; unless by special enactment, those grants have been conferred for a specified period by an Act of the Legislature.

In such case the grant might be considered in the nature of a contract, and the repeal might be held to be a breach of that contract.

The undersigned does not find that any such statutory contract has been made. Under these circumstances he is, therefore, of opinion that no other course is open to the Governor General, than to allow the Act to go into operation.

All which is respectfully submitted.

(Signed,) JOHN A. MACDONALD.

(Copy.)

MY LORD,—On behalf of my Parishioners and myself I have the honor to transmit the enclosed memorial. I most respectfully submit you will find in the document itself intrinsic reasons, sufficient to induce you in Council to refuse your sanction to a School Bill, against which the entire Catholics of New Brunswick and many others protest so generally and so loudly.

It must appear strange to a statesman of such great experience, and enlightened views as your Excellency, that whilst Great Britain and Canada, both the guides to wide legislation among the most enlightened inhabitants of Great Britain and British America, and whilst the greatest men those countries have produced, such as the present and last Premiers, Gladstone and Disraeli, the Bishop of Exeter, the Fellows of Trinity College, Dublin, and your own noble, brave and wise fellow-countryman, the late Duke of Wellington were, and are for Separate Schools, to satisfy the consciences and religious convictions of the various denominations, in their respective countries, the Local Legislature of New Brnnswick would pass a law in opposition to the examples and precedents which they are accustomed to follow.

But I will not pursue the matter any further; I will leave the case in your Excellency's hands, fully confident it will receive from you that discussion which will best secure the peace and serve the best interests of New Brunswick.

I have the honor to be,
Your Excellency's, obedient and humble servant,

(Signed), JAMES QUIN,
Catholic Pastor.

The Right Hon.
Lord Lisgar,
Governor General,
&c., &c.

P. S.—Hon. Mr. Tilley whom I met at his residence, St. Andrew's, told me, the Governor in Council would take the signature of the Pastor for those of his Congregation.

(Signed), JAMES QUIN.

St. Stephens, N. B., June 1st, 1871.

To His Excellency the Governor General of the Dominion of Canada in Council.

The memorial of the undersigned Catholic inhabitants of the Parish of St. Stephen, County of Charlotte, Province of New Brunswick;

Humbly sheweth:—

That the present School Bill just passed by the Legislature of New Brunswick had not been desired by the inhabitants of that Province.

That two fifths of the entire population have been opposed to its becoming law, as is manifest from the petitions numerously signed which have been presented against it.

That the School Bill passed the House of Assembly by the votes of a few members who, if they acted according to the well known wishes of their constituents, would have defeated it.

That the Bill would miscarry in the Legislative Council where the votes were equal on the division, had it not been for the vote of a Government Official, who is a Railroad Commissioner.

That the Bill is the more grievous and intolerable to the people of New Brunswick since it deprives them of important privileges long enjoyed—"Separate Schools," where useful education, founded upon religion, can be taught, and which their fellow subjects in Canada now possess.

That, in the opinion of your memorialists, if the School Bill is put into operation, it will be a prolific source of contention and strife in a vast number of the Local School Districts, the result of which will be the closing of a great number of schools, and the disturbance of that peace which now happily prevails over the Province.

Your memorialists, therefore, humbly pray that your Excellency in Council will exercise your prerogative, and refuse to give the sanction of law to so unfair and obnoxious a measure as this School Bill.

And your memorialists, as in duty bound, shall ever pray, &c.

Signed on behalf of his parishioners,

(Signed) JAMES QUIN,
Catholic Pastor.

St. Stephen,
June 1st, 1871.

(Copy.)

The Governor General's Secretary to the Reverend J. Quin.

OTTAWA, June 6, 1871.

SIR,—I have the honor, by desire of the Governor General, to acknowledge the receipt of a memorial signed by yourself in behalf of the Catholic Inhabitants of the Parish of St. Stephen, praying His Excellency to withhold his assent to a School Bill recently passed by the Legislature of New Brunswick.

In reply I am to inform you that the petition has been duly forwarded to the proper officer, in order that it may be submitted for the consideration of the Privy Council, by whose advice The Royal Instructions bind the Governor General to guide his proceedings in all matters of local concernment.

I have, &c.,

(Signed) JOHN KIDD,
For the Governor's Secretary.

The Reverend J. Quin,
St. Stephen, N. B.

RETURN

AND

SUPPLEMENTARY RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 1st May, 1872;—For copies of all correspondence and telegrams, passed between the Government or any of its Members, and any officers of Customs of the Dominion, also of all correspondence and telegrams passed between the Government or any Member thereof, or any officers of Customs and the Government or any officer of the Customs of the United States, respecting the seizure in the hands of Mr. A. Hamel, jun., of a quantity of merchandize, the property of the firm of Jos Hamel & frères, importing merchants of the City of Quebec.

By Command.

J. C. AIKINS,

Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,

OTTAWA, 6th May, 1872.

In accordance with the recommendation of the Joint Committee on Printing, the above Return is not printed.]

RETURN

SHEWING THE

NAMES, ORIGIN, CREED, POSITION AND PAY

OF ALL

THE EMPLOYES

OF THE

DOMINION GOVERNMENT.

PRINTED BY ORDER OF PARLIAMENT.

OTTAWA
PRINTED BY I. B. TAYLOR, 29, 31 AND 33, RIDEAU STREET.
1872.

TABLE OF CONTENTS.

	PAGE.
Department of the Secretary of State	2
Customs Department.—Head Office at Ottawa	
" " Province of Quebec	
" " " Ontario	8
" " " Manitoba	15
" " " British Columbia	15
" " " Nova Scotia	16
" " " New Brunswick	21
Intercolonial Railway	24
Receiver General's Department	24
Department of the Secretary of State for the Provinces	24
" Agriculture	25
" Justice	25
" Militia and Defence	26
" Finance	26
The Senate	27
The House of Commons	28
Governor General's Office	32
Post Office Department.—Head Office at Ottawa	32
" " Supplementary Return	41
Privy Council Office	44
Inland Revenue Department.—Inside Service	45
" of the Dominion Government.—Outside Service.—Ontario	45
" " " Quebec	
" " " Nova Scotia	49
" " " New Brunswick	50
" Cullers' Service	50
" Slide and Boom Service	51
" Canal Service	51
Department of Public Works	58
" " Government Railways, New Brunswick	62
" " " Nova Scotia	65
" " Additional, appointed in 1871	74
Department of Marine and Fisheries	76
" " Staff in Office of Minister	76
" " Lighthouse Keepers above Montreal	77
" " Officers and Lighthouse Keepers, under supervision of Trinity House, Montreal	78
" " Trinity House, Quebec	79
" " Lighthouse Keepers, River and Gulf of St. Lawrence	79
" " " New Brunswick	80
" " " Nova Scotia	82
" " Montreal River Police	83
" " Quebec "	84
" " Officers of Dominion Steamers	84
" " Board of Steamboat Inspection	85
" " Board of Examiners of Masters and Mates	85
" " Officers of Observatories	85
" " Fishery Officers, Province of Ontario	85
" " " Quebec	86
" " " Nova Scotia	86
" " " New Brunswick	90

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 4th May, 1870; For a Return of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.

By Command

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 6th May, 1872.

STATEMENTS HEREWITH from all the Public Departments, and from The Senate, The House of Commons, and The Intercolonial Railway Commission.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.

NAMES.	Origin.	Creed.	Position.	Pay per annum.
DEPARTMENT OF THE SECRETARY OF STATE.				
				$ cts.
E. Parent	French Canadian.	Roman Catholic	Under Secretary of State	2,840 00
Correspondence Branch.				
W. H. Jones	English	Church of England	First-Class Clerk	1,550 00
J. M. Têtu	French Canadian.	Roman Catholic	do do (Sup'y)	1,400 00
M. L. Amouroux	French	do	Junior 2nd Class Clerk	912 50
Registry Branch.				
E. J. Langevin	French Canadian.	Roman Catholic	Deputy-Registrar & Clerk of Crown in Chancery	2,000 00
J. A. Bélanger	do	do	Senior 2nd Class Clerk	1,150 00
L. A. Catellier	do	do	Junior do do	1,000 00
E. Brousseau	do	do	do do do	912 50
H. J. Morgan	English Canadian	Church of England	do do do	912 50
W. M. Goodeve	do	do	3rd Class Clerk	730 00
Ordnance Land Branch.				
W. F. Coffin	English	Church of England	Ordnance Land Agent	2,150 00
F. P. Austin	do	do	Senior 2nd Class Clerk	1,150 00
W. Mills	do	do	do do	1,100 00
J. Forsyth	Scotch	do	Land Bailiff	500 00
Messengers.				
P. Logan	Irish	Roman Catholic		500 00
E. B. Wood	Canadian.	Methodist		200 00
Office of Queen's Printer.				
B. Chamberlin	English	Church of England	Queen's Printer	2,000 00
T. H. Hodgins	Irish	Roman Catholic	3rd Class Clerk	650 00
C. C. Rogers	English	Church of England	do	600 00
A. Potvin	French Canadian.	Roman Catholic	Messenger	330 00
Dominion Lands Branch.				
J. S. Dennis	English Canadian.	Church of England	Surveyor-G'n'l in Manitoba	2,600 00
G. McMicken	Scotch	Presbyterian	Agent Dominion Lands	2,000 00
A. A. C. La Rivière	French Canadian.	Roman Catholic	Clerk to Mr. McMicken	Not fixed.
CUSTOMS DEPARTMENT.—(*Head Office at Ottawa.*)				
R. S. M. Bouchette	French Canadian	Roman Catholic	Commissioner of Customs	2,600 00
Jas. Johnson	Irish	W. Methodist	Assistant do do	2,150 00
J. Drysdale	Scotch	Presbyterian	1st Class Clerk	1,800 00
J. W. Peachy	French Canadian	Roman Catholic	do	1,750 00
J. R. Andy	do	do	do Sup'y	1,400 00
G. A. Mailleue	Irish	Episcopalian	do do	1,400 00
P. E. Sheppard	British Canadian.	do	do do	1,350 00
W. A. Bell	Scotch do	do	do do	1,200 00
Chas. P. Bliss	English do	do	Senior 2nd Class Clerk	1,300 00
			do do	

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Head Office.*)— *Continued.*				
				$ cts.
H. C. Hay	Irish	Episcopalian	Senior 2nd Class Clerk	1,150 00
Jas. Barry	do	Roman Catholic	do do	1,100 00
P. C. Ryan	do Canadian	do	Junior do	800 00
C. F. Stevens	English do	Episcopalian	do do	750 00
R. H. Mackay	English	do	do 3rd do	600 00
G. W. Grant	Scotch Canadian	Presbyterian	do do	500 00
G. V. Ince	English do	Episcopalian	do do	500 00
T. J. Watters	Irish do	Roman Catholic	do do	450 00
Jos. S. Fairweather	English do	Episcopalian	do do	400 00
C. H. Harding	Irish do	do	Probationary	300 00
F. Bennett	Irish	Presbyterian	do	300 00
J. Walls	do	Roman Catholic	Messenger	500 00
P. Connolly	do Canadian	do	do	390 00
H. Kavanagh	Irish	do	Inspector of Ports	2,000 00
T. F. Knight	English Canadian	W. Methodist	do	1,600 00
CUSTOMS DEPARTMENT.—(*Province of Quebec.*)				
Clarenceville.				
Chas. Stewart	Scotch	Episcopalian	Collector	500 00
Coaticook.				
W. S. Williams	British Canadian	Roman Catholic	Collector	1,100 00
H. Lacroix	French do	do	Landing Waiter	650 00
J. B. Grant	British do	Episcopalian	do	600 00
J. H. Tompkins	do do	Methodist	do and Clerk	650 00
Chas. E. Perry	do do	Episcopalian	do	600 00
A. Workman	Irish	do	do	300 00
D. Young	British Canadian	Methodist	Preventive Officer	300 00
Chas. Taylor	Irish	Episcopalian	do	100 00
Dundee.				
C. D. Phillips	British Canadian	Episcopalian	Collector	1,000 00
J. McGibbon	do	Presbyterian	Preventive Officer	300 00
W. E. Manson	do	Methodist	do	480 00
Robert Tyre	Scotch	Presbyterian	Landing Waiter and Sub-Collector	500 00
M. M. Smith	British Canadian	Episcopalian	do	400 00
Frelighsburgh.				
H. J. Parker	English	Episcopalian	Collector	650 00
G. W. Wells	British Canadian	do	Preventive Officer	200 00
Gaspé.				
J. C. Belleau	French Canadian	Roman Catholic	Collector	1,200 00
G. Le Boutillier	do	do	Landing Waiter	500 00
J. J. Kavanagh	Irish	do	do	600 00
John Perrée	Jerseyman	do	do	200 00
Chas. C. Fox	English	Episcopalian	do	500 00
A. Talbot	French Canadian	Roman Catholic	do	400 00
W. Flynn	Irish Canadian	do	Preventive Officer	300 00
D. B. McGee	do	Episcopalian	Landing Waiter	400 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of Quebec.*)—*Continued.*				
Hemmingford.				$ cts.
Moses Sweet	U. S. Canadian	Unitarian	Collector	750 00
F. S. Proper	German Canadian	Methodist	Landing Waiter	500 00
F. J. Boardman	English	Congregational	Preventive Officer	730 00
Lacolle.				
A. Holden	Irish Canadian	Episcopalian	Collector	500 00
P. Dozois	French do	Roman Catholic	Landing Waiter	400 00
Montreal.				
A. M. Delisle	French Canadian	Roman Catholic	Collector	3,200 00
J. Lewis	Welsh	Protestant	Surveyor	2,000 00
E. Meyer	German Canadian	Roman Catholic	Chief Landing Waiter	1,400 00
Thos. Barry	Irish	do	Assistant Surveyor	1,400 00
L. Globensky	Polish	do	Landing Waiter	875 00
Chas. Selby	English & French	do	do	1,400 00
J. Nelson	English	do	do	1,200 00
J. O'Meara	Irish	do	do	650 00
Edwin Blomeley	English	Protestant	do	400 00
E. Brosseau	French Canadian	Roman Catholic	do	800 00
Omer Allard	do	do	Superintendent of Tide Waiters, &c.	1,100 00
Hy. Fletcher	English	Protestant	Tide Surveyor	1,000 00
F. Crispo	do	do	Chief Clerk	1,600 00
Thos. Watkins	Irish	do	Clerk	1,200 00
Je P. Purcell	do	Roman Catholic	do	1,300 00
Wm. Bleakley	do	Protestant	do	1,300 00
J. Cox	do	Roman Catholic	do	750 00
J. F. Wolff	English Canadian	Episcopalian	do	700 00
F. A. Lavoie	French do	Roman Catholic	do	700 00
W. P. Weir	Scotch	Protestant	do	700 00
Jas. Dunn	Irish	Roman Catholic	do	700 00
H. Têtu	French Canadian	do	do	700 00
Alphonse Laurin	do	do	do	900 00
W. J. O'Hara	Irish Canadian	do	do	800 00
J. A. Jordan	French do	do	do	600 00
A. Bryson	Irish	Protestant	Appraiser	1,800 00
D. Mackay	Scotch	do	do	1,800 00
J. E. Villeneuve	French Canadian	Roman Catholic	do	1,800 00
J. H. McNider	Scotch	Protestant	Ex'ing. Warehouse Keeper	800 00
P. G. Fauteux	French Canadian	Roman Catholic	Assistant Appraiser	800 00
Ewen McLennan	Scotch	Protestant	do	800 00
Thos. Gabler	German	do	do	800 00
P. A. Mercier	French Canadian	Roman Catholic	do	800 00
Omer P. Allard	do	do	do	700 00
Jos. Mailloux	do	do	Packer	500 00
J. Struthers	Scotch	Protestant	Ticket Clerk	600 00
Wm. Burrell	Irish	do	Storeman	600 00
Thos. Sicouright	do	do	Weigher	700 00
Hercules Ellis	do	do	Chief Locker	600 00
Robt. Stuart	do	do	Asst. do	550 00
Jno. Hughes	do	do	House Keeper	500 00
Jno. Thompson	do	do	Acting Clerk	626 00
Arthur Malboeuf	French Canadian	Roman Catholic	do	626 00
R. Thomas	English	Protestant	do	626 00
Jas. Campbell	Irish Canadian	Roman Catholic	Messenger	512 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of Quebec.*)—*Continued.*				
Montreal.—Continued.				$ cts.
R. Powney	English	Protestant	1st Class Tide Waiter	80 00
Wm. Goodbody	Irish	do	do do	80 00
Jno. Hodges	do	do	do do	80 00
Saml. Tidmarsh	do	do	do do	80 00
Alfred Turgeon	French Canadian	Roman Catholic	do do	80 00
Hy. Mullins	Irish	do	do do	80 00
Frs. Clarke	do	do	do do	80 00
L. N. Demers	French Canadian	do	do do	80 00
Jos. L. Laforêt	do	do	do do	80 00
Wm. Peatman	English	Protestant	do do	80 00
P. P. Montanari	French Canadian	Roman Catholic	do do	80 00
Achille Vilbon	do	do	do do	80 00
Wm. Fest	English	Protestant	2nd do	And $2 per day when employed.
Patrick Scanlan	Irish	Roman Catholic	do do	
Frs. Corner	do	Protestant	do do	
Samuel Corner	do	do	do do	
Jas. Casy	do	Roman Catholic	do do	
Robt. Burrell	do	Protestant	do do	
Jas. S. McCormick	do	do	do do	
Thos. Tester	English	do	do do	
Jno. Morrison	Scotch	do	do do	
Philias Lapierre	French Canadian	Roman Catholic	do do	
Alphonse Gallet	French	Protestant	do do	
Hugh Madden	Irish	Roman Catholic	do do	
D. Charbonneau	French Canadian	do	do do	
D. B. Goedike	do	do	do do	
G. P. Krouse	German	Protestant	do do	
G. Tuck	Irish	do	do do	
Jeremiah Madden	do	Roman Catholic	do do	
Jas. Prendergast	do	do	do do	
Jno. Tipson	English Canadian	do	do do	
T. D. Reed	English	Protestant	do do	
W. Hynes	Irish	do	do do	
A. Symmers	do	do	do do	
P. Cummins	do	Roman Catholic	do do	
Martin Barry	do	do	do do	
Benjamin Dupré	French Canadian	do	do do	
Leonidas Sanguinet	do	do	do do	
Thos. Chambers	Irish	Protestant	Supernumery Tide Waiter	$2 00 per day when employed.
Jos. E. Larner	French Canadian	Roman Catholic	do do	
David Tuff	English	Protestant	do do	
T. W. Nicholson	Irish	Roman Catholic	do do	
Paschal Leclere	French Canadian	do	do do	
Fred. Bennett	Irish	Protestant	do do	
J. O. LaBranche	French Canadian	Roman Catholic	do do	
John Campbell	Irish Canadian	do	do do	
Ls. St. Jean	French do	do	do do	
John McCluskey	Irish	do	do do	
L. J. Tessier	French Canadian	do	do do	
James Johnston	Irish	Protestant	do do	
John P. O'Hara	Irish Canadian	Roman Catholic	do do	
A. Ferroghs	Italian	do	do do	
Thomas Green	Irish	Protestant	do do	
J. B. Coullier	French Canadian	Roman Catholic	do do	
J. P. O'Leary	Irish	do	do do	
Remi Boyer	French Canadian	do	do do	
G. W. Crossan	Irish	do	do do	
Jos. Chartrand	French Canadian	do	do do	
J. B. Champoux	do	do	do do	

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

CUSTOMS DEPARTMENT.—(*Province of Quebec.*)—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
Montreal.—Continued.				$ cts.
Arthur Bourret.	French Canadian	Roman Catholic	Supernumery Tide Waiter	
W. Kearney	Irish	do	do do	
J. Lambert	English	do	do do	$2 per
M. Charland	French Canadian	do	do do	day when
Thos. Curry	English	Protestant	do do	employed.
P. O'Brien	Irish	Roman Catholic	Packer	
L. Contant	French Canadian	do	do	
G. Labelle	do	Protestant	do	
John Hannan	Irish	Roman Catholic	do	
A. Lanthier	French Canadian	do	do	
George Craven	Irish	do	Laborer	
O. Barrier	French Canadian	do	do	$1.50 per day.
A. Moussett	do	do	do	
James Moore	Irish	do	do	
E. Larivière	French Canadian	do	do	
L. Brosseau	do	do	do	
E. Daniels	do	do	do	
J. B. Mercier	do	do	do	
F. Ledabouche	do	do	do	
John Kearney	Irish	do	do	
F. Aubert	French Canadian	do	Engineer in charge of furnaces	$2 50 per day.
P. Cooney	Irish	do	Fireman	$1 00 do
Henry Murren	do	do	Night Watchman	
P. Rotott	French Canadian	do	do	$2 per
E. Côté	do	do	do	night.
D. Dupont	do	do	do	
Magdalen Islands.				
J. J. Fox	English	Episcopalian	Collector	800 00
W. Harvey	do	do	Preventive Officer	300 00
New Carlisle.				
John Fraser	Scotch	Church of Scotland	Collector	900 00
W. J. Meagher	Irish Canadian	Roman Catholic	Clerk	500 00
P. C. Beauchesne	French do	do	Landing Waiter	400 00
R. Busteed	Scotch do	Church of Scotland	Preventive officer	300 00
W. Montgomery	Scotch	do do	do	300 00
Philipsburgh.				
W. W. Smith	American	Episcopalian	Collector	600 00
P. E. Luke	Dutch Canadian	do	Preventive Officer	Nil
Potton.				
George Gunn	Scotch	W. Methodist	Collector	500 00
Robert Monson	do	Episcopalian	Preventive Officer	200 00
William Perkins	English	do	do	Nil
Quebec.				
J. W. Dunscomb	English	Protestant	Collector	3,240 00
James A. Green	British Canadian	Roman Catholic	Surveyor	1,000 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of Quebec.*)—*Continued.*				
Quebec.—Continued.				$ cts.
A. E. Langevin	French Canadian	Roman Catholic	Chief Landing Waiter	1,200 00
W. N. Lee	British do	do	Landing Waiter	1,000 00
N. Langevin	French do	do	do	800 00
W. H. Carter	Irish	Protestant	do	800 00
J. Belleau	French Canadian	Roman Catholic	do	700 00
N. N. Ross	Scotch	Protestant	Chief Clerk	1,600 00
L. Dugal	French Canadian	Roman Catholic	Asst. Warehouse Keeper	800 00
George Campbell	British do	Protestant	Cashier	1,100 00
N. Balzaretti	French do	Roman Catholic	Clerk	1,100 00
G. Colby	Irish	Protestant	do	1,100 00
A. G. Hawkins	British Canadian	do	do	900 00
Charles Gouin	French Canadian	Roman Catholic	do	1.100 00
V. Cazeau	do	do	do	800 00
H. McHugh	Irish	do	Sampler and Weigher	600 00
F. X. Metivier	French Canadian	do	Assistant Appraiser	1,000 00
A. G. Bowden	English	Protestant	Sampler and Weigher	600 00
D. Macpherson	Scotch	do	Appraiser	1,400 00
L. Bilodeau	French Canadian	Roman Catholic	do	1,400 00
A. G. Bussières	do	do	Landing Waiter	500 00
G. McKenzie	British Canadian	Protestant	do	400 00
J. Radford	English	do	Preventive Officer	244 00
A. Corneau	French Canadian	Roman Catholic	do	100 00
J. Griffiths	Irish	do	House Keeper & Messenger	500 00
E. O'Brien	British Canadian	do	Clerk	600 00
A. Wheeler	English	Protestant	do	800 00
D. D. O'Meara	British Canadian	Roman Catholic	do	800 00
W. Higgins	Irish	do	Locker	547 50
J. Roy	French Canadian	do	do	547 50
M. Enright	Irish	do	do	547 50
J. Hogan	do	do	do	547 50
E. Robitaille	French Canadian	do	do	547 50
C. Marcotte	do	do	do	547 50
C. Juneau	do	do	Fireman	360 00
J. Deavy	Irish	do	Storeman	336 00
O. Hannon	do	do	do	336 00
Rimouski.				
P. L. Gauvreau	French Canadian	Roman Catholic	Collector	400 00
Russelltown.				
R. Rodgers	Scotch	Episcopalian	Collector	600 00
J. Breadner	Irish	Presbyterian	Preventive officer	400 00
J. Wright	do	Episcopalian	do	Nil
St. Johns.				
B. Burland	Irish	Liberal Christian Unitarian	Collector	1,200 00
H. G. Perchard	English Canadian	Episcopalian	Landing Waiter	700 00
E. A. Bourret	French do	Roman Catholic	do	600 00
R. Wilson	Irish	Methodist	Asst. do	$1 per day
J. Brosseau	French Canadian	Roman Catholic	do do	$2
F. A. Delisle	do	do	do do	600 00
P. Guertin	do	do	do do	$2 per day
J. Remon	do	do	Porter	$3 per mo'h

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
		CUSTOMS DEPARTMENT.—(*Province of Quebec.*)—*Continued.*		
Stanstead.				$ cts.
Charles S. Channel	British Canadian	Protestant	Collector	900 00
A. F. B. Patton	do	do	Landing Waiter	425 00
S. Knight	do	do	Preventive Officer	400 00
M. Dixon	English	do	Sub-Collector	500 00
H. House	British Canadian	do	Preventive Officer	300 00
W. McGowan	Irish	do	Sub-Collector	500 00
S. H. Copp	British Canadian	do	Landing Waiter	400 00
Sutton.				
Benjamin Seaton	English	Protestant	Collector	600 00
Asa Frary	English Canadian	do	Preventive Officer	200 00
Three Rivers.				
Charles H. Godby	English	Roman Catholic	Collector	720 00
		CUSTOMS DEPARTMENT.—(*Province of Ontario.*)		
Amherstburgh.				
Edmund Anderson	Scotch	Episcopalian	Collector	1,000 00
James Hamilton	Irish	Methodist	Landing Waiter	625 00
Henry H. Cunningham	Irish Canadian	Roman Catholic	Preventive Officer	400 00
Belleville.				
Anthony Dixon	English Canadian	Episcopalian	Collector	1,400 00
W. A. Beamish	Irish do	W. Methodist	Landing Waiter	700 00
R. A. Lazier	English do	do	do	400 00
W. McIntosh	Scotch	Presbyterian	Packer and Messenger	300 00
Brantford.				
D. Curtis	English Canadian	Episcopalian	Collector	1,200 00
John C. Davis	do	Congregational	Landing Waiter	720 00
Andrew L. Wilson	Scotch	Episcopalian	Clerk	600 00
Brighton.				
M. K. Lockwood	English Canadian	Protestant	Collector	600 00
Brockville.				
George Easton	English Canadian	Episcopalian	Collector	1,200 00
A. Stewart	Scotch	Presbyterian	Landing Waiter	625 00
Charles Sibbald	do	Episcopalian	do	700 00
Dunham Jones	English Canadian	do	Sub-Collector	400 00
Burwell.				
E. A. Dunham	English Canadian	W. Methodist	Collector	700 00
Thos. Thompson	Scotch	Presbyterian	Preventive Officer	300 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of Ontario.*)—*Continued.*				
Chatham.				$ cts.
J. G. Pennefather	Irish	Roman Catholic	Collector	900 00
A. R. McGregor	English Canadian	Episcopalian	Landing Waiter	500 00
John Duck	do	do	do	300 00
C. Coatsworth	do	do	Preventive Officer	100 00
Chippawa.				
C. St. George Yarwood	English Canadian	Episcopalian	Collector	840 00
Clifton.				
Wm. Leggett	Irish	Episcopalian	Collector	1,400 00
George Liddle	English	do	Surveyor	900 00
Joseph P. Brown	Scotch Canadian	do	Clerk	800 00
Henry B. Rogers	Irish	do	Landing Waiter	800 00
John Smeaton	Scotch	Presbyterian	do	550 00
Thomas W. Hagrath	Irish	Episcopalian	do	550 00
Charles M. Kelly	do	Roman Catholic	do	500 00
Thomas McLaughlin	do	do	do	500 00
John H. Cannon	do	Episcopalian	do	500 00
John Macdonell	Scotch	do	Surveyor	750 00
John Jackson	English	do	Porter	180 00
Cobourg.				
George Perry	English Canadian	Episcopalian	Collector	1,100 00
C. E. Ewing	do	Baptist	Landing Waiter	600 00
A. H. Godard	do	Episcopalian	Preventive Officer	300 00
Port Colborne.				
W. A. Rooth	English Canadian	Episcopalian	Collector	200 00
Joseph S. Scholfield	do	Presbyterian	Landing Waiter	200 00
Gordon Willson	do	do	Actin do	100 00
Cornwall.				
Robert K. Bullock	English	Episcopalian	Collector	800 00
Thos. Dorothy	Irish	Protestant	Landing Waiter	300 00
J. A. Phelan	Irish Canadian	Roman Catholic	do	Nil
Cramahe.				
James M. Merriman	English Canadian	Protestant	Collector of Customs	600 00
Darlington.				
J. Rankin	English Canadian	Presbyterian	Collector	1,200 00
John McClellan	Irish	do	Landing Waiter	400 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of Ontario.*)—*Continued.*				
Dover.				$ cts.
T. B. Barrett	Irish	Episcopalian	Collector	875 00
C. Walsh	Irish Canadian	do	Landing Waiter	500 00
Dundas.				
W. B. Gwyn	English	Episcopalian	Collector	1,000 00
Dunnville.				
Wm. A. McCrae	Scotch Canadian	Episcopalian	Collector	850 00
Jasper Murphy	Irish	Roman Catholic	Landing Waiter	500 00
Elgin.				
R. P. McMillan	Scotch Canadian	Roman Catholic	Collector	125 00
John Reid	Irish	Presbyterian	Landing Waiter	75 00
Fort Erie.				
R. Graham	Scotch Canadian	W. Methodist	Collector	1,000 00
O. Schryer	American	do	Landing Waiter	600 00
R. G. Warren	British Canadian	Episcopalian	do	600 00
Charles Treble	English	do	do	600 00
Wm. Eden	do	do	do	600 00
John Magwood	Irish	do	Preventive Officer	300 00
Gananoque.				
John Ormiston	English	Episcopalian	Collector	600 00
E. Nalty	Irish	do	Landing Waiter	250 00
Goderich.				
Darius Doty	English Canadian	Methodist	Collector	1,000 00
R. Radcliff	do	Episcopalian	Clerk	500 00
R. McIntosh	Scotch Canadian	do	Landing Waiter	400 00
Guelph.				
E. Carthew	English	Episcopalian	Collector	1,000 00
S. S. Walsh	Irish	do	Landing Waiter	550 00
Hamilton.				
W. H. Kittson	English Canadian	Episcopalian	Collector	2,600 00
Wm. Beatty	Irish	do	Surveyor	1,400 00
Charles R. M. Sewell	English Canadian	do	Chief Clerk	1,200 00
Thomas Clark	do	Methodist	Sub-Collector	800 00
H. Lennon	Irish	Episcopalian	do	700 00
G. B. Spencer	English Canadian	do	Appraiser	1,200 00
Frs. Shepherd	English	Congregational	Clerk	900 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of Ontario.*)—*Continued.*				
Hamilton.—Continued.				$ cts.
John Birss	English Canadian.	Episcopalian	Clerk	800 00
Henry W. Woodward	English	do	do	800 00
James S. Amos	Scotch	Presbyterian	do	800 00
Wm. Gillespy	English	Episcopalian	do	700 00
Wm. Agnew	Irish	do	Searcher and Packer	500 00
H. A. L. Dixon	English	do	Landing Waiter	800 00
Wm. G. Munday	do	Congregational	do	600 00
M. J. Anderson	English Canadian.	Episcopalian	do	600 00
P. S. McHenry	Irish	Roman Catholic	do	500 00
G. J. Horan	do	do	Locker	600 00
Port Hope.				
M. F. Whitehead	Nova Scotian	Episcopalian	Collector	1,200 00
Henry Forbes	English	do	Surveyor and Clerk	850 00
G. P. Lauder	Irish	do	Landing Waiter	550 00
Kingston.				
W. B. Simpson	English Canadian.	Episcopalian	Collector	1,900 00
W. R. Mingaye	English	do	Surveyor	1,100 00
James Hopkirk	Scotch Canadian	Presbyterian	1st Clerk	900 00
G. H. Detlor	English do	Methodist	Appraiser	850 00
J. S. Smyth	do do	Episcopalian	2nd Clerk	800 00
Thos. Bryan	Irish	Roman Catholic	3rd Clerk	800 00
D. Lynch	do	do	1st Landing Waiter	650 00
E. McColl	Scotch	Episcopalian	2nd do	550 00
Thos. Meagher	Irish Canadian	Roman Catholic	3rd do	550 00
Jos. Kidd	Irish	Episcopalian	4th do	550 00
W. H. Davy	English Canadian.	do	5th do	400 00
Joseph Murphy	Irish	Roman Catholic	6th do	500 00
Chas. Allum	English	Episcopalian	Messenger and Packer	300 00
Hy. Dugdale	Irish	Methodist	Tide Waiter	200 00
Kingsville.				
James King	English	Episcopalian	Collector	400 00
London.				
J. B. Strathy	Scotch	Episcopalian	Collector	1,700 00
D. Cameron	do	Presbyterian	Surveyor	1,100 00
E. S. Collett	Irish	Episcopalian	Clerk	950 00
R. Abbott	English	do	Appraiser	900 00
R. Irvine	Irish	do	Landing Waiter	600 00
Wm. Barker	English	do	Assistant Clerk and Locker	700 00
R. J. Evans	Irish	do	Landing Waiter	500 00
F. McDiarmid	Scotch	Presbyterian	Preventive Officer	100 00
H. Boyd	Irish	Episcopalian	Messenger	350 00
Morrisburgh.				
Hiram Carman	English Canadian.	Episcopalian	Collector	720 00
Hy. McCullough	Irish	Roman Catholic	Preventive Officer	375 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of Ontario.*)—*Continued.*				
Napance.				$ cts.
Jno. Benson	English Canadian.	Episcopalian	Collector	700 00
T. Beeman	do	W. Methodist	Landing Waiter	400 00
Niagara.				
W. Kirby	English	Episcopalian	Collector	900 00
J. Hall	Irish	do	Surveyor	700 00
A. Shaw	English Canadian.	Methodist	do	600 00
Newcastle.				
F. Farncomb	English	Episcopalian	Collector	600 00
Oakville.				
R. K. Chisholm	British Canadian .	Presbyterian	Collector	600 00
Oshawa.				
C. Walsh	Irish	Roman Catholic	Collector	800 00
R. Welch	do	Episcopalian	Landing Waiter	500 00
Ottawa.				
D. Graham	Scotch	Presbyterian	Collector	1,500 00
B. Gordon	Irish	do	Chief Clerk	900 00
J. T. Bartram	British Canadian.	Episcopalian	Clerk	700 00
C. Carleton	Irish	Roman Catholic	1st Landing Waiter	700 00
A. Heney	do	Methodist	2nd do	600 00
J. Litle	do	do	3rd do	550 00
W. A. McAgy	Nova Scotian.	Episcopalian	Appraiser	700 00
Jno. Burns	Irish	Methodist	Messenger	240 00
Owen Sound.				
W. A. Stephens	Irish	Christian Disciple.	Collector	600 00
Paris.				
F. H. Haycock	English	Episcopalian	Collector	1,000 00
Penetanguishene.				
W. N. Rutledge	British Canadian.	Episcopalian	Collector	300 00
Jno. D. Beatty	do	W. Methodist	Landing Waiter	200 00
Picton.				
Jno. P Robbin	British Canadian.	W. Methodist	Collector	625 00
J. S. Clute	Holland	Presbyterian	Landing Waiter	500 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

CUSTOMS DEPARTMENT.—(*Province of Ontario.*)—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
Picton.—Continued.				$ cts.
F. F. Mandeville	Irish	Roman Catholic	Landing Waiter	400 00
W. H. McLean	British Canadian	Episcopalian	Preventive Officer	400 00
Hy. Low	Irish do	Roman Catholic	Landing Waiter	300 00
Prescott.				
H. D. Jessup	British Canadian	Episcopalian	Collector	1,200 00
G. Twomley	do	do	Surveyor	900 00
M. Dowsley	do	Presbyterian	Landing Waiter and Clerk.	650 00
W. Armstrong	English	Episcopalian	do	600 00
W. Geralds	British Canadian	do	do	600 00
A. S. Geralds	do	Methodist	Preventive Officer	400 00
J. G. Elwood	Irish	Presbyterian	do	730 00
Port Rowan.				
P. Bennett	English and Irish.	No creed	Collector	1,000 00
Sarnia.				
J. W. Verner	Jersey Canadian	Episcopalian	Collector	1,000 00
G. N. Matheson	Scotch	Presbyterian	Landing Waiter	550 00
Jno. King	Irish	Roman Catholic	do and Clerk.	600 00
G. W. Thomas	Scotch	Episcopalian	do	450 00
W. Gurd	Irish	do	do	400 00
J. McIntyre	Scotch	Presbyterian	Office Keeper	40 00
Saugeen.				
Wm. Keith	Scotch	Presbyterian	Collector	500 00
Sault Ste. Marie.				
J. Wilson	Scotch	Church of Scotland	Collector	1,000 00
Peter Brown	do	do	Landing Waiter	500 00
J. Bowker	Irish	Episcopalian	do	650 00
J. Cousins	English	do	do	500 00
S. T. Thebo	French Canadian	Roman Catholic	do	200 00
R. Inglish	British do	Episcopalian	do	200 00
Ls. Muron	French do	Roman Catholic	Boatman	140 00
Jos. Muron	do do	do	do	140 00
R. Muron	do do	do	do	140 00
J. B. Mustit	do do	do	do	140 00
St. Catherines.				
James Clark	English Canadian	Episcopalian	Collector	1,000 00
Jno. S. Clark	do	do	Landing Waiter	200 00
J. B. Benson	do	do	do and Clerk.	600 00
C. R. Ellis	English	do	do	600 00
J. McCopper	Scotch Canadian	do	do	Nil.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of Ontario.*)—*Continued.*				
Port Stanley.				$ cts.
Wm. Hemphill	English Canadian.	Episcopalian	Collector	500 00
Stratford.				
J. Hamilton	Scotch	Presbyterian	Collector	800 00
Jas. Purcell	Irish	Episcopalian	Landing Waiter	550 00
Trenton.				
Alex. Macaulay	Irish	Roman Catholic	Collector	400 00
Toronto.				
Jas. E. Smith	British Canadian	Episcopalian	Collector	2,600 00
T. C. Scott	Scotch	Disciple of Christ	Surveyor	1,600 00
Jno. Douglas	do	Presbyterian	Chief Clerk	1,400 00
Chas. B. Mackay	English	do	Clerk	1,200 00
Jas. Woodward	do	Disciple of Christ.	do	900 00
D. Delamere	Irish	Episcopalian	do	1,000 00
Russel Inglis	Scotch	Presbyterian	do	1,000 00
Jno. Beaty	Irish	Disciple of Christ.	do	900 00
L. P. Sherwood	British Canadian	Episcopalian	do	600 00
Thos. McLean	Irish	do	do	600 00
Thos. Spence	British Canadian	do	do	500 00
Chas. Price	Irish	do	do	600 00
J. B. Robinson	British Canadian	do	do	550 00
Alex. Macpherson	Scotch	Presbyterian	Appraiser	1,400 00
J. P. Dunn	Irish	Episcopalian	Chief Landing Waiter	900 00
T. McCarthy	do	Roman Catholic	Landing Waiter	600 00
H. Sinclair	Scotch	Presbyterian	do	600 00
H. D. Wilson	British Canadian	Protestant	do	600 00
J. Scanlan	Irish	Roman Catholic	do	600 00
W. Howe	do	Episcopalian	do	600 00
John Wilson	do	do	do	600 00
Jos. Stitt	do	Presbyterian	Locker	800 00
R. G. A. Patton	Scotch	do	do	750 00
A. Duff	do	do	do	750 00
R. Yorston	do	Disciple of Christ.	do	550 00
J. W. Horgan	Irish	Roman Catholic	do	560 00
J. R. McCaffrey	Irish Canadian	Episcopalian	do	500 00
Jno. Green	Irish	do	Landing Waiter	500 00
B. Anderson	Scotch Canadian	do	do	500 00
Jno. Clark	English	do	do	500 00
D. McLeod	Scotch	Methodist	do	500 00
Jos. Milbourne	English	Episcopalian	do	500 00
G. Watson	Scotch	Presbyterian	do	660 00
Chas. Little	British Canadian	Episcopalian	do	200 00
G. L. Hughson	American	Presbyterian	Preventive Officer	100 00
R. Leatch	Irish	Episcopalian	Porter, Ex'ing Warehouse	500 00
George Mackay	British Canadian	Presbyterian	do	456 25
Chas. Stemin	Irish	Disciple of Christ.	Messenger and Housekeeper	400 00
Wallaceburgh.				
Chas. Fraser	English	Methodist	Collector	800 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of Ontario.*)—*Continued.*				
Wallaceburgh.—Continued.				$ cts.
Jas. Cowan	Irish	Episcopalian	Landing Waiter	550 00
Wm. Count Brockdorff	German	do	do	200 00
Whitby.				
Wm. Warren	Irish	Episcopalian	Collector	800 00
F. F. Pole	English	do	Landing Waiter	550 00
R. Brennan	Irish	Roman Catholic	do	500 00
Windsor.				
W. Benson	Irish	Episcopalian	Collector	1,300 00
W. Morton	Scotch	Presbyterian	Surveyor	900 00
Miles Cowan	British Canadian	Episcopalian	Landing Waiter and Clerk.	750 00
Jno. Dennison	Irish	Roman Catholic	do	550 00
J. L. Morentelle	French Canadian	do	do	550 00
Jno. Clarke	English	Episcopalian	do	550 00
Thos. Perkins	do	do	do	550 00
Jno. Watson	British Canadian	do	do	500 00
J. Richardson	do	do	do	550 00
Geo. Gilkes	English	do	do	500 00
T. H. Morin	French Canadian	Roman Catholic	do	500 00
J. Watt	Scotch	Presbyterian	Messenger	78 00
Woodstock.				
W. H. Van Ingen	American	Episcopalian	Collector	850 00
CUSTOMS DEPARTMENT.—(*Province of Manitoba.*)				
Winnipeg.				
G. B. Spencer	British Canadian	Episcopalian	Acting Collector	Nil.
F. T. Bradley	do	do	Sub do	800 00
Jno. Emslie	Scotch	Presbyterian	Clerk	800 00
G. H. Young	British Canadian	Methodist	do	650 00
P. B. Douglas	Scotch	Presbyterian	do	600 00
Roger Marion	French Half-breed.	Roman Catholic	Landing Waiter	600 00
Chas. N. Bell	British Canadian	Presbyterian	do	600 00
CUSTOMS DEPARTMENT.—(*Province of British Columbia.*)				
Victoria, New Westminster, and Out-ports.				
Hon. Wm. Hamley	English	Episcopalian	Collector	3,800 00
Wm. H. McCrea	Irish	do	Chief Clerk	1,940 00
Chas. S. Finlaison	English	do	Clerk	1,452 00
Chas. S. Wylde	do	do	Revenue Officer	1,704 00
George Frye	do	do	Landing Waiter	1,704 00
Peter German	do	do	do	600 00
Tomkins Brew	Irish	do	do	1,200 00
R. Hunter	English	do	do	900 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
CUSTOMS DEPARTMENT.—(*Province of British Columbia.*)—*Continued.*				
Victoria, New Westminster, & Out-ports.—Continued.				$ cts.
W. Hudley	American	Episcopalian	Landing Waiter	696 00
R. Lawson	Scotch	do	do	696 00
J. C. Haynes	Irish	do	Deputy Collector	1,704 00
W. H. Lowe	British Canadian	do	do	1,224 00
CUSTOMS DEPARTMENT.—(*Province of Nova Scotia.*)				
Amherst.				
J. J Kerr	British	Protestant	Collector	1,200 00
W. Brundige	do	do	Preventive Officer	60 00
A. D. Chapman	do	do	do	60 00
G. B. Forrest	do	do	do	60 00
J. McNab	do	do	Sub-Collector	350 00
N. Nicholson	do	do	do	150 00
J. Moffat	do	do	do	250 00
J. C. Brundige	do	do	do	200 00
Annapolis.				
J. C. Tobias	British	Episcopalian	Collector	750 00
G. F. Ditmars	do	do	Sub-Collector	150 00
A. B. Thorne	do	do	do	100 00
Jno. L. Rice	do	Wesleyan	Preventive Officer	60 00
Antigonish.				
Hugh Macphie	British	Presbyterian	Collector	900 00
E. G. Randell	do	Church of England	Sub-Collector	200 00
E. Corbet	do	Roman Catholic	Collector	100 00
Arichat.				
S. Donovan	Irish	Roman Catholic	Collector	750 00
M. Kavanagh	British	do	Sub-Collector	250 00
A. McDonald	do	do	do	100 00
Jas. A. Shaw	do	Episcopalian	Preventive Officer	100 00
Jas. Hearn	do	Roman Catholic	do	100 00
Peter Le Lacheur	do	Presbyterian	do	60 00
Jas. Purcell	do	do	do	900 00
Baddeck.				
A. Cameron	British	Presbyterian	Collector	600 00
Jno. McNeil	do	do	Sub-Collector	250 00
Angus Morrison	do	do	Preventive Officer	60 00
Jno. Baine	do	do	do	60 00
Chs. L. Campbell	do	do	Landing Waiter	60 00
J. McAuley	do	do	Sub-Collector	100 00
D. McLeod	Scotch	do	Preventive Officer	200 00
D. McDonald	do	do	Sub-Collector	200 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
CUSTOMS DEPARTMENT.—(*Province of Nova Scotia.*)—*Continued.*				
Barrington.				
D. Sargent	British	W. Methodist	Collector	400 00
J. Trefry	do	Free Baptist	Landing Waiter	60 00
S. Smith	do	do	do	60 00
J. Swaine	do	W. Methodist	Sub-Collector	100 00
A. Snow	do	Free Baptist	Landing Waiter	60 00
Bridgetown.				
S. S. Thorne	British	Church of England	Collector	650 00
W. Graves	do	Baptist	Sub-Collector	100 00
T. R. Brooks	do	do	Preventive Officer	60 00
A. M. Chute	do	do	do	60 00
Cornwallis.				
E. Rand	British	Baptist	Collector	500 00
C. V. Rawding	do	do	Sub-Collector	150 00
E. De Wolfe	do	Methodist	do	200 00
H. Morris	do	Free Church	do	150 00
H. V. B. Farnsworth	do	Episcopalian	do	150 00
G. Lockwood	do	do	Preventive Officer	60 00
S. N. Porter	do	Baptist	do	60 00
A. Ogilvie	do	do	do	60 00
Digby.				
B. Viets	British	Episcopalian	Collector	750 00
Z. Croscup	do	Baptist	Sub-Collector	300 00
B. H. Ruggles	do	Christian	do	200 00
J. Thurber	do	Baptist	do	200 00
C. Gidney	do	do	do	150 00
M. Rearden	Irish	Roman Catholic	Preventive Officer	60 00
E. W. Potter	British	Millerite	do	60 00
J. A. Smith	do	Disciples	do	60 00
Halifax.				
E. Binney	British	Episcopalian	Collector	2,600 00
H. B. Pauin	do	do	Registrar of Shipping	1,800 00
W. G. Fir	do	do	Warehouse Keeper	1,200 00
J. W. Ross	do	Presbyterian	Surveyor	1,400 00
J. Cullen	Irish	Roman Catholic	Landing Waiter	900 00
Jas. Kerr	British	Presbyterian	do	900 00
G. A. V. Paw	do	Episcopalian	do	700 00
T. P. Jost	do	do	do	800 00
J. F. Muncey	do	Methodist	Appraiser	1,200 00
J. S. Bessonett	do	do	Assistant Appraiser	600 00
Jos. Austen	do	Universalist	Gauger	650 00
S. R. Caldwell	do	Methodist	do	650 00
T. C. Wier	do	Baptist	P'tive. Officer and Weigher	730 00
T. R. De Wolfe	do	Methodist	1st Clerk to W. H. Keeper	1,400 00
J. Fitzgerald	Irish	Roman Catholic	Clerk	900 00
J. S. Morris	British	Episcopalian	do	580 00
W. H. Hill	do	do	do	1,200 00
C. M. Almon	do	do	do	750 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
CUSTOMS DEPARTMENT.—(*Province of Nova Seotia.*)—*Continued.*				
Halifax.—Continued.				
J. Marshall	British	Methodist	Clerk	700 00
J. G. Morris	do	Episcopalian	do	700 00
J. F. Richardson	do	do	do	800 00
J. Eckersley	English	Methodist	do	800 00
J. W. Hennigar	British	do	do	600 00
D. Creamar	do	Roman Catholic	do	800 00
J. S. Richardson	do	Episcopalian	do	800 00
F. R. Coleman	do	Methodist	do	300 00
A. Kelley	do	Episcopalian	Tide Surveyor	803 00
J. Hills	English	Methodist	Shipping Officer	730 00
J. Wallace	Irish	Roman Catholic	do	700 00
S. Noble	British	Presbyterian	do	730 00
D. Fraser	Scotch	do	Locker	547 50
W. McLean	English	Episcopalian	do	547 50
W. Reynolds	British	Presbyterian	do	547 50
E. Le Guire	do	Roman Catholic	do	547 50
Geo. Ryder	English	Episcopalian	do	456 25
Geo. G. Gray	British	Methodist	do	456 25
W. Maloney	Irish	Roman Catholic	do	456 25
N. McDonald	British	Baptist	do	730 00
J. F. Burnham	do	do	do	456 25
Jno. Steele	Scotch	do	do	456 25
D. Calder	do	Presbyterian	do	456 25
M. McCurdy	do	do	do	456 25
Wm. Pitts, jun	British	Roman Catholic	do	456 25
J. McNutt	do	Methodist	do	456 25
J. Crose	do	do	do	365 00
W. A. Garrison	do	Episcopalian	Assistant to Gaugers	456 25
J. De Courcy	Irish	Roman Catholic	do Appraisers	456 25
D. Gallagher	British	do	Boatman	456 25
F. Beazley	do	Episcopalian	do	456 25
W. Nunn	do	do	do	456 25
J. Beazely	do	do	do	456 25
Wm. Blackman	English	do	Office Keeper & Messenger.	365 00
J. Venables	British	do	Asst. to Reg. of Shipping.	78 00
T. Mullana	Irish	Roman Catholic	Tide Waiter	547 50
Geo. Bayley	English	Episcopalian	do	456 25
R. Miller	Irish	do	Day Pay Officer	534 75
Chs. Grant	British	Presbyterian	do	582 05
S. White	do	Roman Catholic	do	561 22
T. Shea	Irish	do	do	534 76
R. Hodgers	British	Episcopalian	do	522 15
T. Hatch	English	do	do	612 60
J. Whelan	Irish	Roman Catholic	do	526 28
Liverpool.				
J. H. Freeman	British	Episcopalian	Collector	1,200 00
Wm. Bryden	do	The Bible	Landing Waiter	650 00
Londonderry.				
D. A. Davidson	British	Baptist	Collector	400 00
J. M. Crowe	do	Presbyterian	Sub-Collector	100 00
A. T. Corbett	do	do	do	100 00
H. Fulmer	do	Methodist	Preventive Officer	60 00
Jas. McCardy	do	Presbyterian	do	60 00
Jas. Creelman	do	do	do	60 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
CUSTOMS DEPARTMENT.—(*Province of Nova Scotia.*)—*Continued.*				
Lockeport.				
Geo. Stalker	British	Presbyterian	Collector	400 00
Lunenburg.				
E. Dowling	British	Presbyterian	Collector	600 00
Jno. Harley	do	Episcopalian	Sub-Collector	250 00
C. D. Mader	do	do	do	200 00
D. Dimock	do	Baptist	do	150 00
Jno. Myrer	do	Methodist	Preventive Officer	60 00
W. Geldert	do	Episcopalian	do	60 00
J. Rudolf	do	do	do	60 00
G. H. Mills	do	Baptist	do	60 00
Margaretsville.				
D. W. Landers	British	Methodist	Collector	390 00
North Sydney.				
T. S. Boun	British	Protestant	Collector	1,200 00
E. Boun	do	do	Preventive Officer	240 00
P. Collins	do	do	Sub-Collector	100 00
Parrsborough.				
A. S. Townsend	British	Episcopalian	Collector	400 00
F. F. Hatfield	do	do	Sub-Collector	150 00
Chs. Ward	do	Methodist	do	100 00
Pictou.				
D. McCulloch	British	Presbyterian	Collector	1,400 00
Jas. Patterson	do	do	Warehouse Keeper & Clerk	700 00
Wm. Campbell	do	do	Sub-Collector	300 00
C. Murdoch	do	Episcopalian	Landing Waiter	300 00
R. Murray	Scotch	Presbyterian	Sub-Collector	100 00
A. McPherson	British	do	Landing Waiter	300 00
B. McLeod	Scotch	do	do	300 00
G. J. Campbell	British	Episcopalian	do	300 00
Port of Hawkesbury.				
M. McDonald	Scotch	Roman Catholic	Collector	400 00
Port Hood.				
E. D. Tremain	British	Episcopalian	Collector	400 00
Jas. Ross	do	Presbyterian	Sub-Collector	100 00
D. McFarlane	do	Roman Catholic	Preventive Officer	60 00
T. J. McKeen	do	Presbyterian	do	60 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
CUSTOMS DEPARTMENT.—(*Province of Nova Scotia.*)—*Continued.*				
Port Medway.				
Jos. J. Letson	British	Free Baptist	Collector	400 00
Port Mulgrave.				
V. J. Wallace	British	Presbyterian	Collector	550 00
W. J. Piglow	do	do	Sub-Collector	150 00
J. Marshall	do	Episcopalian	do	200 00
S. McMillan	do	Presbyterian	do	100 00
A. P. McKenzie	do	do	do	100 00
G. B. Hadley	do	Episcopalian	Preventive Officer	60 00
J. Anderson	do	do	do	60 00
Shelburne.				
Jas. Muir	British	Episcopalian	Collector	400 00
Sydney.				
C. E. Leonard	British	Episcopalian	Collector	800 00
F. E. Leaver	do	do	Sub-Collector	100 00
L. Kavanagh	do	Roman Catholic	do	100 00
G. Rigby	do	do	do	100 00
C. H. Rigby	do	do	do	250 00
W. W. Bown	do	Episcopalian	do	200 00
D. McKeen	do	Presbyterian	do	200 00
J. Townsend	do	Methodist	Preventive Officer	60 00
Weymouth.				
S. Jones	British	Roman Catholic	Collector	550 00
A. Bourneuf	do	do	Sub-Collector	250 00
J. V. Stewart	do	do	do	200 00
R. Sanderson	do	Episcopalian	do	200 00
B. A. Robicheau	do	Roman Catholic	Preventive Officer	60 00
Windsor.				
E. O'Brien	British	Presbyterian	Collector	1,200 00
W. Davison	do	Baptist	Sub-Collector	200 00
A. McN. Parker	do	Episcopalian	do	100 00
T. A. Malcom	do	Presbyterian	do	100 00
A. Roy	do	do	do	150 00
J. Sterling	do	Methodist	Landing Waiter	400 00
J. M. O'Brien	do	Presbyterian	Preventive Officer	0
Yarmouth.				
T. E. Moberly	British	Episcopalian	Collector	1,400 00
H. A. Hood	do	do	Surveyor	700 00
A. Lent	do	Baptist	Sub-Collector	100 00
F. S. D. Entremont	do	Roman Catholic	do	100 00
R. Perry	do	Baptist	do	100 00
M. B. Porter	do	do	Landing Waiter	

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
CUSTOMS DEPARTMENT.—(*Province of Nova Scotia.*)—*Continued.*				
Yarmouth.—Continued.				
R. J. Bignay	British	Episcopalian	Landing Waiter	400 00
L. White	do	Roman Catholic	Preventive Officer	60 00
J. Huntingdon	do	Congregational	Extra Tide Waiter	400 00
CUSTOMS DEPARTMENT.—(*Province of New Brunswick.*)				
Bathurst.				
Francis Meahan	British Canadian	Roman Catholic	Collector	1000 00
Wm. Napier	do	Episcopalian	Landing Waiter	400 00
Wm. Armstromg	do	do	Preventive Officer	160 00
John Kerr	Scotch	Presbyterian	Sub-Collector	400 00
Daniel Foley	Irish	Roman Catholic	Preventive Officer	100 00
Bay Verte.				
Wm. W. Wood		W. Methodist	Collector	400 00
Campo Bello (Welchpool).				
John Farmer	British Canadian	Episcopalian	Collector	600 00
Turner Wooster	do	do	Sub-Collector	200 00
Caraquette.				
Jas. G. C. Blackhall	Scotch	Presbyterian	Collector	600 00
Chatham.				
D. Ferguson	Scotch	Presbyterian	Collector	1200 00
J. C. E. Carmichael	do	Episcopalian	Landing Surveyor	700 00
R. T. Millar	do	Presbyterian	Appraiser	500 00
Wm. Anderson	do	do	Locker	300 00
Thos. Crunmen	Irish	Roman Catholic	Clerk and Landing Waiter.	300 00
Wm. T. Connors	do	do	Tide Waiter	240 00
Dalhousie.				
Wm Montgomery	British Canadian	Presbyterian	Collector	1000 00
E. J. Stewart	do	do	Locker and Searcher	260 00
Wm. Jamieson	Scotch	do	Preventive Officer	200 00
James McMillan	do	do	do	100 00
Wm. Doyle	British Canadian	Roman Catholic	do	100 00
R. McMillan	do	Presbyterian	Sub-Collector	400 00
John Duncan	do	do	Locker and Searcher	260 00
Dorchester.				
John Hickman	Irish	Episcopalian	Collector	600 00
R. R. Chapman	English	Methodist	Sub-Collector	400 00
Frank Belliron	French	Roman Catholic	Tide Waiter	100 00

STATEMENT of the Names, Origin, Creed. Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
CUSTOMS DEPARTMENT.—(*Province of New Brunswick.*)—*Continued.*				
Fredericton				
T. R. Robertson	Scotch	Presbyterian	Collector	1200 00
J. W. M. Ruel	English	Episcopalian	Chief Clerk	650 00
H. G. Winter	British Canadian	Methodist	Appraiser	550 00
Solomon Vail	do	Episcopalian	Preventive Officer	120 00
Hillsborough.				
William Wallace	British Canadian	Baptist	Collector	600 00
Samuel Blake	do	Presbyterian	Tide Waiter	100 00
James Brewster	English	Baptist	Sub-Collector	400 00
John Brewster	do	do	Tide Waiter	100 00
Moncton.				
James Robertson	Scotch	Methodist	Collector	800 00
Newcastle.				
W. Parker	British Canadian	Methodist	Collector	1200 00
D. McGruar	Scotch	Presbyterian	Warehouse Keeper	400 00
R. T. Millar	do	do	L'ing. Waiter and Searcher	300 00
Richibucto.				
Henry Livingston	Irish	Presbyterian	Collector	1000 00
John Cochrane	Scotch	do	Tide Waiter	240 00
Wm. Brown	British Canadian	Episcopalian	T. W., Locker & Searcher	200 00
Jas. B. Rugs	do	Baptist	Tide Waiter	160 00
Oliver Richard	do	Roman Catholic	do	60 00
Robert Douglas	Irish	Episcopalian	Sub-Collector	600 00
John Bowser	English	do	Tide Waiter	100 00
Richmond Station.				
John T. Allan	Scotch	W. Methodist	Collector	800 00
Joseph Connell	English	Second Advent	Preventive Officer	300 00
Sackville.				
James D. Dixon	British Canadian	W. Methodist	Collector	.....
Stephen Siddall	do	Episcopalian	Landing Waiter	.....
Rufus Cole	do	Baptist	Sub-Collector	.....
Shediac.				
D. Harrington	British Canadian	Episcopalian	Collector	880 00
A. McQueen	do	Presbyterian	Preventive Officer	120 00
Shippegan.				
P. J. N. Dumaresq	Jersey	Roman Catholic	Collector	600 00
J. Savoy	French	do	Preventive Officer	60 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
CUSTOMS DEPARTMENT.—(*Province of New Brunswick.*)—*Continued.*				
St. Andrew's.				
C. M. Gove	British Canadian	Episcopalian	Collector	1200 00
W. Whitlock	do	do	Landing Waiter and Clerk.	600 00
John Brown	Irish	do	Preventive Officer	456 25
St. George.				
James A. Moran	Scotch	Baptist	Collector	700 00
Douglas Wetmore	British Canadian	Episcopalian	Tide Waiter	365 00
Robert Sutherland	do	do	do	240 00
St. John				
J. R. Ruel	English	Episcopalian	Collector	2600 00
H. Whiteside	do	Methodist	Chief Clerk	1400 00
G. F. Matthew	British Canadian	Episcopalian	Clerk	1000 00
W. Clawson	Irish	Methodist	do	900 00
J. Barber	Scotch	Presbyterian	do	1000 00
C. F. Olive	British Canadian	Methodist	do	600 00
H. Vradenburgh	do	Baptist	do	850 00
J. MacLaren	do	Presbyterian	do	800 00
J. Sandall	English	Episcopalian	do	1100 00
A. Atcheson	do	do	do	912 50
H. P. Sandall	British Canadian	do	do	300 00
A. Harrison	do	do	do	400 00
S. S. Gerow	do	Baptist	Landing Surveyor	1200 00
R. M. Longmaid	do	do	Waiter and Searcher	900 00
Jas. Flewelling	do	Episcopalian	do	900 00
W. H. Boyer	do	Methodist	Tide Surveyor	900 00
E. L. Thorn	do	Episcopalian	Appraiser	1200 00
Isaac Woodward	do	Quaker	do	600 00
S. B. Paterson	do	Congregational	Appraiser and Clerk	700 00
W. J. B. Master	do	Methodist	Locker	550 00
H. Coffey	do	Episcopalian	do	550 00
P. Daley	do	do	do	550 00
W. H. Francis	do	Methodist	do	550 00
Thos. Burtin	do	do	do	550 00
J. Humphreys	Irish	Episcopalian	do	550 00
W. Carleton	do	Roman Catholic	do	550 00
S. Daley	do	Episcopalian	do	550 00
C. Laird	do	do	Messenger	450 00
E. N. J. Stewart	British Canadian	do	Gauger	100 00
W. Johnston	do	do	Tide Waiter	456 25
C. Pigeon	do	do	do	456 25
T. O. Sandall	do	Methodist	do	456 25
Wm. Colwall	do	Baptist	do	456 25
J. O. Dunham	do	Episcopalian	do	456 25
W. H. Olive	do	do	do	456 25
D. Sinclair	do	Methodist	do	456 25
M. B. Owens	Irish	Roman Catholic	do	456 25
J. Williams	British Canadian	Baptist	do	456 25
S. Robinson	do	do	do	456 25
W. S. Robinson	Scotch	do	do	80 00
W. L. Dobbin	British Canadian	Episcopalian	Laborer	365 00
J. Roulston	do	Methodist	do	456 25
J. Dixon	Irish	Roman Catholic	Tide Waiter	300 00
A. T. Dunn	British Canadian	Presbyterian	Sub-Collector	200 00
G. K. Hawsen	do	Baptist	do	200 00
J. Carson	do	Presbyterian	do	200 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
CUSTOMS DEPARTMENT.—(*Province of New Brunswick.*)—*Continued.*				
St. Stephens.				
H. Webber	Irish	Episcopalian	Collector	1400 00
H. Hatton	British Canadian	Methodist	Surveyor and Gauger	700 00
Wm. W. Grimmer	do	Episcopalian	Assistant Appraiser	600 00
John D. Wilson	do	do	Tide Waiter	550 00
West Isles.				
J. E. Dixon	British Canadian	Episcopalian	Collector	600 00
Woodstock.				
W. E. Dibbon	British Canadian	Episcopalian	Collector	1000 00
F. W. Brown	do	do	Sub-Collector	400 00
F. Tibbets	do	Methodist	do	400 00
J. Hartt	Irish	Roman Catholic	Preventive Officer	100 00
C. S. Appleby	British Canadian	Congregational	do	100 00
E. M. Truessell	do	Baptist	do	100 00
H. Walhaupter	do	Methodist	do	100 00
R. Albert	do	Roman Catholic	do	200 00
INTERCOLONIAL RAILWAY.				
Aquila Walsh	Canadian	Episcopalian	Chairman	4000 00
Hon. E. B. Chandler	do	do	Commissioner	3000 00
C. J. Brydges	English	do	do	3000 00
Hon. A. W. McLelan	Canadian	Presbyterian	do	3000 00
S. Fleming	Scotch	do	Chief Engineer	4800 00
Ralph Jones	Canadian	Episcopalian	Secretary	2000 00
T. C. Duplessis	do	Roman Catholic	Accountant	2000 00
Charles Ritchie	do	Episcopalian	Assistant Accountant	1000 00
RECEIVER GENERAL'S DEPARTMENT.				
T. D. Harington	English	Church of England	Deputy Receiver General	2,600 00
T. C. Bramley	do	do	Book Keeper and C'f. Clerk	2,000 00
F. Lewis	do	do	1st Class Clerk	1,600 00
J. B. Stanton	British Canadian	do	do Suppl'y	1,600 00
J. F. Pellant	French Canadian	Roman Catholic	do do	1,500 00
L. F. Dufresne	do	do	do do	1,400 00
C. W. Shay	British Canadian	Church of England	do do	1,400 00
F. Hunter	do	Church of Scotland	do do	1,400 00
J. B. H. Neeve	English	Church of England	Senior 2nd Class Clerk	1,100 00
C. Gough	do	Roman Catholic	Probationary Clerk	400 00
J. R. Nash	do	Church of England	Extra Clerk	$2.50 per day.
F. L. Casault	French Canadian	Roman Catholic	Office Keeper & Messenger	500 00
F. McCaffrey	Irish	do	Messenger	500 00
DEPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES.				
E. A. Meredith	Irish	Church of England	Under Secretary	2,000 00
Grant Powell	English Canadian	do	1st Class Clerk	1,750 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
EPARTMENT OF THE SECRETARY OF STATE FOR THE PROVINCES.—*Continued.*				
				$ cts.
Henry E. Steele	English	Church of England	1st Class Supernumery Clerk	1,400 00
Charles J. Birch	do	do	1st do do	1,400 00
Nazaire Têtu	French Canadian	Roman Catholic	3rd do	730 00
William Howe	English Canadian	Presbyterian	Private Secretary	750 00
Indian Branch.				
William Spragge	English	Church of England	Deputy Superintendent General Indian Affairs	2,150 00
Charles T. Walcot	do	do	1st Class Clerk, Supern'ry.	1,400 00
L. Vankoughnet	English Canadian	Christian	Senior 2nd do do	1,150 00
J. P. M. Lecourt	French Canadian	Roman Catholic	Junior 2nd do do	1,000 00
J. V. de Boucherville	do	do	do do do	900 00
F Smith	English Canadian	Presbyterian	3rd Class Clerk	400 00
J. Butler Butler	English	Church of England	Junior 2nd Class Clerk	700 00
Christopher Owne	do	do	Messenger	430 00
Harry J. Brook	do	do	do	300 00
DEPARTMENT OF AGRICULTURE.				
J. C. Taché	French Canadian	Roman Catholic	Deputy to Minister of Agriculture	2,600 00
J. Lowe	English	Church of England	Temporary Secretary	1,200 00
A. J. Cambie	Irish	do	1st Class and Chief Clerk	1,750 00
F. J. S. Dore	English	do	1st Class Clerk	1,250 00
Rev. C. Tanguay	French Canadian	Roman Catholic	Attaché	1,200 00
S. Drapeau	do	do	Senior 2nd Class Clerk	1,150 00
W. H. Johnson	English	Church of England	Junior do	1,000 00
C. C. Neville	do	do	do do	1,020 00
S. Ferland	French Canadian	Roman Catholic	do do	950 00
N. F. Boissonault	do	do	3rd Class Clerk	730 00
H. Casgrain	do	do	2nd do	800 00
J. W. O'Brien	Irish Canadian	do	3rd do	720 00
E. Têtu	French Canadian	do	3rd do	730 00
D. Routhier	Irish Canadian	do	3rd do	730 00
J. E. Dauteuil	French Canadian	do	3rd do	730 00
D. Lanigan	Irish Canadian	do	3rd do	730 00
J. B. Jackson	English	do	3rd do	730 00
J. F. Dionne	French Canadian	do	3rd do	730 00
W. J. Lynch	Irish Canadian	do	3rd do	500 00
H. G. Hopkirk	Scotch Canadian	Presbyterian	Private Secretary	700 00
J. E. Lemieux	French Canadian	Roman Catholic	Housekeeper	500 00
J. Leveillé	do	do	Model Repairer	450 00
J. Boily	do	do	Messenger	500 00
J. B. Moreau	do	do	do	500 00
J. B. Lacroix	do	do	do	450 00
DEPARTMENT OF JUSTICE.				
Hewitt Bernard	English	Church of England	Deputy to Minister of Justice	2,600 [illegible]
John Stuart	Canadian	Catholic	1st Class Clerk	1,300 00
Charles Drinkwater	English	Church of England	Senior 2nd Class Clerk	1,200 00
Frederick White	do	do	Junior do	800 00
Edward Radford	do	do	do do	750 00
Frank George Becher	do	do	Probationary Clerk	300 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF JUSTICE.—*Continued.*				
Patrick Lynch	Irish	Roman Catholic	Messenger	500 00
Francis Curran	do	do	do	480 00
DEPARTMENT OF MILITIA AND DEFENCE.				
Minister's Office.				
Geo. Futvoye	English	Roman Catholic	Deputy Minister of Militia and Defence	2,600 00
B. Sulte	French Canadian	do	1st Class Clerk	1,250 00
J. R. E. Chapleau	do	do	Junior 2nd Class Clerk	1,000 00
H. D. J. Lane	English Canadian	Church of England	do do	900 00
J. W. Gow	Irish Canadian	Roman Catholic	Messenger	500 00
Account Branch.				
Robert Berry	Scotch	Presbyterian	Chief Clerk (1) and Accountant	2,350 00
Evariste Gelinas	French Canadian	Roman Catholic	1st Class Supernum'y Clerk	1,350 00
C. H. O'Meara	Irish Canadian	do	do do	1,350 00
W. H. Aumond	French Canadian	do	Junior 2nd Class Clerk	800 00
F. X. Huot	do	do	do do	800 00
W. F. Palmer	English	do	Temporary Clerk	$2 per diem
N. Casault	French Canadian	do	Messenger	500 0
Store Branch.				
Lieut.-Col. Wily	English	Church of England	Director of Stores, &c., Chief Clerk (2)	1,900 00
Geo. Grant	Scotch	do	Junior 2nd Class Clerk	1,000 00
W. M. Steers	Irish	do	do do	950 00
S. Pope	English	do	do do	800 00
J. Yeomans	do	do	Clerk (unclassified)	500 00
Adjutant General's Office.				
W. R. Wright	English	Church of England	Chief Clerk (2)	1,900 00
Lieut.-Col. Stuart	do	do	Mil. Sec., A.G.M., 1st Class	1,350 00
Grant Seymour	English Canadian	do	1st Class Supernum'y Clerk	1,350 00
F. X. Lambert	French Canadian	Roman Catholic	Senior 2nd Class Clerk	1,250 00
Geo. Sherwood	English Canadian	Church of England	do do	1,000 00
C. Junot	French Canadian	Roman Catholic	Junior do	800 00
T. C. Larose	do	do	do do	800 00
Sir J. D. H. Hay	Scotch	Church of England	do do	730 00
Louis Morel	French Canadian	Roman Catholic	Office Keeper	500 00
Michael Ryan	Irish	do	Messenger	480 00
Col. Robertson Ross	Scotch	Church of England	Adjutant General of Militia	4,000 00
Lieut.-Col. Powell	English Canadian	do	Deputy Adjutant General of Militia	2,840 00
FINANCE DEPARTMENT.				
John Langton	English	Church of England	Auditor General	2,600 00
Wm. Dickinson	do	do	Deputy Inspector General	2,600 00
C. Ready	do	do	3rd Class and Private Secretary	900 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
FINANCE DEPARTMENT.—*Continued.*				
M. A. Higgins	Irish	Church of Rome	1st Class Clerk	1,750 00
Norris Godard	English	Church of England	Chief Clerk	2,100 00
Thomas Cruse	do	do	1st Class	1,750 00
C. J. Anderson	Scotch	do	1st Class Supernumerary	1,400 00
G. M. Jarvis	English	do	do do	1,300 00
R. W. Baxter	do	Methodist	do do	1,300 00
J. A. Torrance	Scotch	Church of England	do do	1,300 00
R. O'Reilly	Irish	Church of Rome	Junior Second	700 00
H. A. Jones	English	Church of England	do	700 00
John Simpson	do	do	Assistant Auditor	2,400 00
James Patterson	Scotch	do	1st Class	1,350 00
E. C. Barber	English	do	do Supernumerary	1,350 00
J. B. Simpson	do	do	Junior Second	730 00
W. H. Cotton	do	do	3rd Class	550 00
Thomas Hector	do	do	1st do	1,500 00
Thomas Cross	do	do	3rd do	650 00
Archibald Cary	do	do	1st do Supernumerary	1,600 00
Frederick Toller	do	do	Senior Second	1,100 00
W. A. Blackmore	do	do	Junior do and Secret'y	1,150 00
George Aumond	French Canadian	Church of Rome	3rd Class and Superintend'g printing Dominion Notes	800 00
W. L. Orde	English	Church of England	Probationary	300 00
R. J. Killaly	Irish	do	3rd Class	500 00
Thomas Ross	Canadian	do	Chief Clerk and Accountant Contingencies	2,150 00
C. W. Jones	English	do	Junior Second	950 00
J. D. Tims	Irish	Church of Rome	Financial Inspector	2,000 00
J. Young	Scotch	Presbyterian	Junior Second	1,000 00
J. Rhodes	English	Church of Rome	3rd Class	400 00
Patrick Pender	Irish	do	Messenger	500 00
John Pender	do	do	do	480 00
Thomas Coad	do	do	do	390 00
Treasury Board.				
J. M. Courtney	English	Church of England	Chief Clerk	2,000 00
THE SENATE.				
Robert LeMoine	French Canadian	Roman Catholic	Clerk, Master in Chancery, Cashier and Accountant	2,400 00
Fennings Taylor	English	Church of England	Deputy Clerk, Clerk Assis't and Master in Chancery	2,000 00
E. L. Montizambert	French Canadian	do	Law Clerk, Clerk of Com's. and English Translator	1,600 00
Rev. John Johnston	Irish do	do	Chaplain	200 00
James Adamson	Irish	do	First English Clerk	1,100 00
Peter Miller	...	...	2nd English Clerk	1,000 00
John George Bourinot	Canadian, (N. S.)	Episcopalian	3rd English Clerk and Shorthand Writer	900 00
Neil W. McLean	Canadian, (Ont.)	Church of Scotland	English Clerk and Clerk of Private Bills	800 00
A. A. Boucher	French Canadian	Roman Catholic	First French Translator and Clerk	1,300 00
Alfred Garneau	do	do	Second French Translator and Clerk	1,200 00
J. de St. Dennis LeMoine	do	do	Third French Translator and Sergeant-at-Arms	500 00
Victor E. Tessier	do	do	Clerk of French Journals	900 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

Names.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
THE SENATE.—*Continued.*				
René Kimber	French Canadian	Roman Catholic	Gentleman Usher of the Black Rod	1,000 00
J. B. Myrand	do	do	Post Master	800 00
S. Skinner	English	Baptist	House-keeper	800 00
E. Botterell	do	Church of England	Door-keeper	400 00
Peter Rattey	French Canadian	Roman Catholic	Speaker's Messenger	700 00
Peter Dunne	Irish	do	Assistant House-keeper, News Room, &c.	700 00
J. Wingfield	Scotch	Scotch Church	Assistant Door-keeper Wardrobe, &c.	500 00
Frederick Gilbert	English	Congregational	Bank Messenger, &c	500 00
Sessional.				
James Doherty	Irish	Roman Catholic	Messengers	
Thomas Wheeler	do	do	do	
Louis Robitaille	French Canadian	do	do	
John Dunne	Irish	do	do	
A. Boucher	French Canadian	do	do	
A. Douaire	do	do	do	
J. C. Young	Irish do	do	do	
John Wingfield	Scotch do	Church of Scotland	Page	
J. N. Rattey	French do	Roman Catholic	do	
Edward Buche			do	
Louise Lubbée	French Canadian	Roman Catholic	Permanent Charwomen	80 cents per diem
Catherine Young	Irish	do	do do	
Flore Fortier	French Canadian	do	do do	
—— Pothier	do	do	do do	
HOUSE OF COMMONS.				
Chief Department.				
Wm. B. Lindsay	Scotch Canadian	Church of Rome	Clerk of the House	2,975 00
Alfred Patrick	English Canadian	Church of England	Clerk Assistant	1,925 00
Wm. Fanning	Irish	Church of Rome	Second Clerk Assistant and Translator of Votes and Proceedings and Journals	1,800 00
D. W. Macdonell	Scotch Canadian	Church of England	Sergeant-at-Arms	1,662 50
Law Department.				
G. W. Wicksteed	English	Church of England	Law Clerk	2,975 00
E. P. Dorion	French Canadian	Church of Rome	Assistant Law Clerk and Chief French Translator	1,750 00
Wm. Wilson, jun	English Canadian	Church of England	Assistant Law Clerk and Chief English Translator	1,750 00
Accountant's Department.				
Thomas Vaux	English	W. Methodist	Accountant	1,750 00
Joshua Stansfeld	do	Church of England	Assistant Accountant and Book-Keeper	1,050 00
Routine and Records Department.				
F. Mac Gillivray	Scotch Canadian	Presbyterian	Clerk of Routine & Records	1,050 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
HOUSE OF COMMONS.—*Continued.*				
General Department.				$ cts.
H. Hartney	Upper Canadian	Church of England	Chief Office Clerk and Clerk to Printing Committee	1,750 00
H. B. Stuart	Scotch Canadian	Church of Rome	English writing Clerk	800 00
Ed. Dénéchaud	French Canadian	do	French Writing Clerk	1,050 00
J. H. T. Blais	do	do	Junior Clerk	800 00
H. R. Smith	English Canadian	Church of England	do	800 00
Henry Lindsay	Scotch Canadian	do	do	800 00
J. S. Sloane	Irish	W. Methodist	do	800 00
C. Panet	French Canadian	Church of Rome	do	800 00
Wm. C. Bowles	Irish Canadian	W. Methodist	do	8 0 00
J. E. B. McCready	Scotch	Baptist	do	800 00
R. McG. Moffatt	Nova Scotian	Church of England	do	800 00
Controverted Elections.				
J. P. Leprohon	French Canadian	Church of Rome	Clerk of Controverted Elections	1,400 00
Committee Department.				
Alfred Todd	English	Cathlc Apostolic C.	Chief Clerk of Committees and Clerk of Private Bills	1,750 00
T. Patrick	English Canadian	do	2nd Clerk of Committees and Clerk of Railway Committees	1,312 50
F. X. Blanchet	French Canadian	Church of Rome	3rd Clerk of Committees	1,000 00
Votes and Proceedings.				
H. Poetter	German	Church of England	Clerk of Votes and Proceedings	1,225 00
French Translators' Department.				
T. G. Coursolles	French Canadian	Church of Rome	Assistant French Translator	1,400 00
J. F. Gingras	do	do	do do	1,225 00
E. Blain de St. Aubin	French	do	do do	1,225 00
H. A. McCoy	Irish	do	do do	870 00
English Translators' Department.				
Wm. Wilson, sen	English	Church of England	Assistant English Translator	1,400 00
F. Hayes	Irish	Church of Rome	do do	1,400 00
Journal Department.				
W. B. Ross	Scotch Canadian	Church of England	English Journal Clerk	1,400 00
P. Rivet	French Canadian	Church of Rome	French Journal Clerk	1,225 00
A. G. D. Taylor	English Canadian	Church of England	Assistant English Journal Clerk	875 00
Post Office Department.				
F. N. Belcourt	French Canadian	Church of Rome	Postmaster	875 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
		HOUSE OF COMMONS.—*Continued.*		
Sergeant-at-Arms Department.				$
A. L. Cardinal	French Canadian	Church of Rome	Chief Messenger	1,160 00
J. O'Connor	Irish	do	Door Keeper	700 00
Jos. Lemonde	French Canadian	do	Speaker's Messenger	700 00
Ed. Pelletier	do	do	Post Office Messenger	600 00
Wm. Graham	Irish	Church of England	Messenger	600 00
Edward Storr	English	W. Methodist	Assistant Door Keeper	600 00
Ed. Steacy	Irish	Church of England	Messenger	600 00
Etienne Roy	French Canadian	Church of Rome	do	600 00
Joseph Brown	Irish	Church of England	do	600 00
O. Roberge	French Canadian	Church of Rome	do	600 00
M. Latlamme	do	do	do	600 00
A. Elliott	Irish	W. Methodist	do	500 00
J. E. Asselin	French Canadian	Church of Rome	do	400 00
N. Turgeon	do	do	do	500 00
James Fitzsimmons	Irish	do	Night Watchman	400 00
G. Smith	English	Church of England	do	400 00
Extra Service.				
F. Bedard	French Canadian	Church of Rome	Extra Clerk	$4 00 per diem.
J. H. Dewitt	German Canadian	do	do	
Wm. L. Gane	English	Church of England	do	
J. W. McEdward	Scotch Canadian	Church of Scotland	do	
R. A. Kent	English Canadian	Church of England	do	
F. Talbot	French Canadian	Church of Rome	do	
P. A. Stewart	Scotch Canadian	Baptist	do	
Samuel Watters	English	W. Methodist	do	
Francis Nolan	Irish	Church of Rome	do	
H. M. Schwabe	English	Unitarian	do	
T. Falardeau	French Canadian	Church of Rome	do of Post Office	
J. E. Dorion	do	do	Extra French Translator	
J. A. Genand	do	do	do do	
A. D. Decelles	do	do	do do	
N. Balzaretti	do	do	do do	
J. Stansfeld	English Canadian	Church of England	Extra Clerk, Post Office.	
J. Blais	French Canadian	Church of Rome	do do	
J. S. Thompson	Irish Canadian	Church of England	Extra Clerk	
F. Macdonell	Scotch Canadian	do	do	
Sessional Messengers.				
J. B. Asselin, sen	French Canadian	Church of Rome	Extra Messenger	$2 per diem.
J. B. Lajoie	do	do	do	
Jos. Turgeon	do	do	do	
P. Labelle	do	do	do	
W. Atley	English	Church of England	do	
C. Brazeau	French Canadian	Church of Rome	do	
R. C. Boudreault	do	do	do	
J. C. Jones	Irish Canadian	do	do	
V. Bryce	Irish	do	do	
A. Lortie	French Canadian	do	do	
E. Desrocher	do	do	do	
S. Lefranchise	do	do	do	
J. Martel	do	do	do	
A. Reddick	Irish	Church of England	do	
N. Jeullet	French Canadian	Church of Rome	do	

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.		Pay per annum.
HOUSE OF COMMONS.—*Continued.*					
Sessional Messengers.—Continued.					
B. Champagne	French Canadian	Church of Rome	Extra Messenger		$2 00 per diem.
M. Cunningham	Scotch	do	do		
J. Hurley	Irish Canadian	do	do		
C. Kavanagh	do	do	do		
J. Maguire	do	do	do		
R. W. Fletcher	Australian	Church of England	do		
James Sinclair	Scotch	do	House Carpenter		$2 during session. $1.50 during recess.
Pages.					
P. Lynch	Irish Canadian	Church of Rome	Page		$1.50 per diem.
E. Valliquette	French Canadian	do	do		
G. Barrette	do	do	do		
E. Wood	English Canadian	W. Methodist	do		
H. McNaughton	Irish Canadian	Church of Rome	do		
E. Fisher	do	Church of England	do		
E. Steacy	do	do	do		
E. Hayes	do	do	do		
F. Helliwell	do	Church of Rome	do		
O. Boudreault	French	do	do		
F. Lamb	Irish Canadian	do	Wash Room		$1 per diem.
T. Storr	English Canadian	W. Methodist	do		
Engineers, &c.					
A. Kerr	Scotch Canadian	Presbyterian	Chief Engineer		$2.50 per diem.
R. McLaren	Irish	Church of England	Stoker	Employed during winter.	
J. Little	do	Presbyterian	do		
R. Macfarlane	Scotch	do	Woodman		
P. Secord	French Canadian	Church of England	Fire Lighter		
S. Norton	Irish	do	Woodman		
T. Tipton	do	do	do		
W. Montgomery	do	do	Gas Lighter		
Charwomen.					
Bridget Kennedy	Irish	Church of Rome	Charwoman	Permanent	50 cts. per diem.
Mary C. Martel	Irish Canadian	do	do		
Ann Maguire	Irish	do	do		
C. Ethier	French Canadian	do	do		
Angele Bolduc	do	do	do		
O. Valiquette	do	do	do		
Janet McCallum	Scotch	Church of Scotland	do		
Margaret Hanlin	Irish	Church of Rome	do		
Agathe Normand	French Canadian	do	do		
J. Valiquette	do	do	do		
E. Pelan	Irish	Church of England	Charwoman	Employed during session	50 cts. per diem.
E. Warren	do	do	do		
M. Williamson	do	Church of Rome	do		
A. Rainville	French Canadian	Presbyterian	do		
T. Trotter	do	Church of Rome	do		
A. Paquette	do	do	do		
A. Brunell	do	do	do		
M. Chalifour	Irish	do	do		
Mrs. Kelly	do	do	do		
Mrs. Janveau	French Canadian	do	do		

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
GOVERNOR GENERAL'S OFFICE.				
F. Turville	English	Romanist	Governor's Secretary	2,400 00
H. Cotton	do	Protestant	1st Chief Clerk	1,950 00
J. Kidd	do	do	1st Class Clerk	1,400 00
F. D. Burrowes	Irish	do	2nd do	800 00
G. Smith	English	do	Messenger	500 00
Sergt. Stroulger	do	do	Orderly	183 00
POST OFFICE DEPARTMENT.—*(Head Office at Ottawa.)*				
W. H. Griffin	English	Church of England	Deputy P. M. General	2,600 00
W. White	do	do	Secretary	2,050 00
W. D Lesueur	Canadian	Church of Scotland	1st Class Clerk	1,250 00
G. H. Hargrave	English	Church of England	Senior 2nd Class Clerk	1,100 00
B. King	Canadian	do	do do	1,150 00
H. S. Weatherley	English	do	1st do	1,500 00
R. Sinclair	Scotch	do	Senior 2nd do	1,150 00
H. J. Garratt	English	do	do do	1,100 00
W. S. Thomas	do	do	do do and Private Sec'ty. to P. M. General.	1,100 00
H. W. Griffin	Canadian	do	Junior 2nd Class Clerk	850 00
J. Plunkett	Irish	Roman Catholic	do do	800 00
A. Lindsay	Canadian	Church of England	do do	700 00
G. R. Cochran	do	do	3rd Class Clerk	500 00
A. J. Boswell	do	do	do do	500 00
W. A. Maingy	Island of Jersey	do	Junior 2nd Class Clerk	700 00
E. H. Fletcher	Canadian	do	3rd Class Clerk	450 00
A. W. Throop	do	do	do do	400 00
P. J. Vankoughnet	do	do	Probationary	300 00
H. A. Wicksteed	English	do	Chief Clerk	2,250 00
E. C. Hayden	Canadian	do	1st Class Clerk	1,500 00
W. H. Smithson	do	W. Methodist	do do	1,250 00
R. Oliver	Irish	Church of England	1st Class Supernumerary	1,400 00
J. Audette	Canadian	Christian, *no sect*	1st Class Clerk	1,300 00
E. H. Benjamin	United States	Church of England	Senior 2nd Class	1,100 00
P. E. Bucke	English	do	do	1,100 00
J. McNab	Canadian	do	Junior 2nd Class	750 00
C. Roger	Scotch	Church of Scotland	do	700 00
G. M. Patrick	Canadian	Catholic Apostolic	3rd Class	500 00
J. Walsh	Irish	Church of England	Junior 2nd Class	700 00
R. J. Oliver	Canadian	Roman Catholic	3rd Class	500 00
D. McCarthy	Irish	do	do	450 00
H. G. Hopkirk	Canadian	Church of Scotland	do	450 00
C. Ready	do	Church of England	Probationary	300 00
J. Ashworth	do	do	Chief Clerk	1.850 00
J. Boyd	Irish	Church of Scotland	Junior 2nd Class	1,000 00
P. Lesueur	Island of Jersey	W. Methodist	Chief Clerk	2,300 00
C. W. Jenkins	English	do	1st Class	1,250 00
J. Brophy	Irish	Roman Catholic	Senior 2nd Class	1,150 00
E. G. Bennett	Canadian	Brothers in Christ	Junior 2nd Class	900 00
J. McDougall	do	Free Church	do do	750 00
R. J. Shaw	English	W. Methodist	3rd Class	600 00
C. J. Higgins	Irish	Roman Catholic	do	500 00
L. Blanchet	Canadian	do	do	500 00
C. Sangster	do	Church of England	do	500 00
M. K. Dunlevie	do	do	do	500 00
J. C. Stewart	Irish	do	Chief Clerk	1,850 00
D. Matheson	Scotch	Church of Scotland	Senior 2nd Class	1,150 00
S. Burnham	Canadian	Church of England	3rd Class	500 00
J. R. Smith	do	do	do	450 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
POST OFFICE DEPARTMENT.—*Continued.*				
J. Lemoine	Canadian	Roman Catholic	Probationary	300 00
J. S. Armstrong	do	Church of England	do	300 00
S. Smith, jr	do	do	do	300 00
Wm. H. Harrington	do	Baptist	do	300 00
William Henricas Kreps	Netherlands	Roman Catholic	do	300 00
E. B. Bell	Canadian	Church of England	Temporary	45 per mo.
M. May	Irish	W. Methodist	do	45 per mo.
N. Garland	Canadian	Church of England	do	45 per mo.
James F. Wall	do	Roman Catholic	do	45 per mo.
G. Rance	English	Church of England	Office Keeper	500 00
J. Yorrick	Irish	do	Messenger	450 00
W. O'Brien	Canadian	Roman Catholic	do	450 00
M. Bennett	Irish	do	do	420 00
Charles Cotterill	English	Church of England	Laborer	365 00
Samuel Greenfield	do	do	do	365 00
R. B. McEwan	Scotch	Church of Scotland	do	365 00
Ocean Mail Service.				
W. F. Bowes	Irish	Church of England	Ocean Mail Clerk	*600 00
S. T. Green	do	do	do	*600 00
F. Barlee	English	do	do	*600 00
James Ferguson	Canadian	do	do	600 00
James O'Hara	Irish	do	do	†480 00
B. F. Campbell	Canadian	do	do	†420 00
E. Blondeau	do	Roman Catholic	do	†360 00
H. R. Sewell	do	Church of England	Acting do	†420 00
Chief Inspector's Office.				
John Dewe	English	Church of England	Chief Post Office Inspector	2,400 00
J. D. Patterson	Canadian	do	3rd Class Clerk	600 00
Railway Mail Clerks attached thereto.				
J. D. Thompson	Canadian	Church of England	1st Class R. M. Clerk	960 00
N. W. H. Curtis	do	Catholic Apostolic	do do do	960 00
P. Pennock	do	Wesleyan	2nd Class do do	800 00
E. Gordon	English	Church of England	do do do	640 00
A. Jones	Canadian	do	3rd Class do do	480 00
Inspector's Office—London Division.				
Gilbert Griffin	English	Church of England	P. O. Inspector	2,000 00
Geo. Cox	do	do	1st Class Clerk	1,280 00
H. A. Johnson	Irish	Baptist	2nd do	1,100 00
A. Thomson	Scotch	Free Church	3rd do	800 00
F. Cronyn	Canadian	Church of England	4th do	500 00
M. O'Meara	Irish	Roman Catholic	Porter	1 per diem
Railway Mail Clerks attached to London Division.				
P. Purdon	Irish	Church of England	1st Class Clerk	960 00
John Wynn	Canadian	do	do	960 00

*$60 a round trip in addition to salary. †$50 a round trip in addition to salary.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
		POST OFFICE DEPARTMENT.—*Continued.*		
Railway Mail Clerks attached to London Division.—Continued.				$ cts.
B. D. D. Rorison	Canadian	Church of England	1st Class Clerk	960 00
A. G. McWhinney	Irish	do	do	960 00
Wm. Mathews	Canadian	Wesleyan	do	960 00
J. G. Wright	do	Free Church	do	960 00
A. Kerby	do	Church of England	2nd Class Clerk	800 00
Jas. J. Ross	Scotch	Free Church	do	800 00
M. Wright	English	Church of England	do	800 00
A. G. Sanders	do	do	do	720 00
A. J. Patton	Canadian	Free Church	do	640 00
T. J. Essex	English	Church of England	do	720 00
H. Cousins	Canadian	Free Church	do	640 00
J. Graham	do	Church of England	do	720 00
R. Kelly	do	Wesleyan	do	640 00
W. J. Jarvis	Irish	Church of England	3rd Class Clerk	520 00
C. Fisher	Canadian	do	do	480 00
J. Moerschfelder	French	do	do	480 00
W. T. Cox	Canadian	do	do	480 00
H. Mercer	do	do	do	480 00
L. Sewell	do	do	do	480 00
James Friel	Irish	Roman Catholic	do	480 00
T. H. Mickleburgh	English	Church of England	4th Class Clerk	480 00
W. Mitchell	Canadian	Roman Catholic	do	480 00
G. V. Salter	do	Church of England	do	480 00
Inspector's Office, Toronto Division.				
M. Sweetnam	Canadian	Wesleyan	Post Office Inspector	2,000 00
W. Cuppage	Irish	Free Church	2nd Class Clerk	980 00
G. J. Mason	Canadian	Church of England	do	1,100 00
H. W. Jackson	English	do	3rd do	600 00
J. McLochlin	Irish	do	do	760 00
J. B. Robinson	Canadian	do	Probationary	300 00
J. Buchan	Scotch	Free Church	Messenger	$1 00 per diem.
Railway Mail Clerks attached to Toronto Division.				
R. MacGillivray	Canadian	Church of England	Foreign Mail Clerk	1,100 00
M. Malone	Irish	Roman Catholic	do	1,100 00
A. McCarthy	do	do	1st Class Clerk, R.M.C.	960 00
W. Sheppard	do	Church of England	do	960 00
A. Carruthers	Scotch	Free Church	2nd Class Clerk	800 00
A. Pindlay	do	do	do	800 00
J. Davidson	Canadian	Roman Catholic	do	800 00
J. F. Fenwick	Scotch	Free Church	do	800 00
W. Butler	do	do	do	720 00
G. A. Burnham	Canadian	Church of England	do	720 00
W. G. Griffith	Irish	do	do	720 00
P. Hynes	do	Roman Catholic	do	720 00
J. O. Bennett	Canadian	Methodist	do	720 00
W. Beatty	Irish	Church of England	do	800 00
W. G. Ashdown	English	Congregational	do	640 00
Thos. Tyner	Irish	Church of England	do	640 00
G. F. Burns	Scotch	Free Church	do	640 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
		POST OFFICE DEPARTMENT.—*Continued.*		
Railway Mail Clerks attached to Toronto Division. —Continued.				$ cts.
P. J. Treahy	Irish	Roman Catholic	2nd Class Clerk	640 00
G. A. Shaw	Canadian	Church of England	do	640 00
T. G. Birchall	do	do	do	640 00
C. Way	English	do	do	640 00
J. F. Ruttan	Canadian	do	3rd Class Clerk	480 00
T. A. Corbett, jr.	do	do	do	480 00
C. F. Jarvis	do	do	do	480 00
C. J. H. Winstanley	do	do	do	500 00
W. Noble	do	Roman Catholic	Temporary Clerk	$40 per mo.
Inspector's Office, Kingston.				
R. W. Barker	Canadian	Church of England	Post Office Inspector	1,600 00
J. Meagher	Irish	Roman Catholic	3rd Class Clerk	640 00
A. Jones	Canadian	Church of Englond	4th do	400 00
Railway Mail Clerks attached to Kingston Division.				
W. F. Burnham	Canadian	Church of England	2nd Class Clerk	640 00
Robt. Peden	do	Church of Scotland	3rd do	480 00
J. Sullivan	do	Roman Catholic	do	480 00
Inspector's Office, Montreal.				
E. F. King	English	Church of England	Post Office Inspector	2,000 00
C. W. Hayden	Canadian	do	Chief Clerk	1,280 00
F. W. King	do	do	3rd Class Clerk	600 00
F. J. Logie	do	Church of Scotland	do	600 00
David Nelligan	Irish	Roman Catholic	do	600 00
P. Nelligan	do	do	Messenger	$1 00 per diem.
Railway Mail Clerks attached to Montreal Division.				
A. Walmsley	Canadian	Church of England	1st Class Clerk	960 00
D. A. Ross	do	do	do	960 00
F. C. Dettmers	German	Lutheran	2nd Class Clerk	800 00
J. Bayley	Irish	Church of England	do	800 00
D. Somerville	Scotch	do	do	800 00
Geo. Jones	Canadian	do	do	720 00
A. Couillard	do	Roman Catholic	do	720 00
E. Lefebvre	do	do	do	720 00
C. Lefebvre	do	do	do	720 00
Wm. Murphy	do	do	do	720 00
J. Vallée	do	do	do	720 00
W. H. Flood	do	Church of England	do	720 00
F. Briegel	German	Lutheran	do	640 00
A. Denis	Canadian	Roman Catholic	do	720 00
A. Menzies	do	Church of England	do	640 00
E. Ermatinger	do	Roman Catholic	3rd Class Clerk	480 00
J. L. Mercier	do	do	do	480 00
J. O. Benoit	do	do	do	480 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
POST OFFICE DEPARTMENT.—*Continued.*				
Railway Mail Clerks attached to Montreal Division.—Continued.				$ cts.
W. D. Smith	Canadian	Church of England	3rd Class Clerk	480 00
L. N. Dionne	do	Roman Catholic	do	480 00
E. Webb	do	Church of England	do	480 00
Inspector's Office, Quebec.				
W. G. Sheppard	Canadian	Church of England	Post Office Inspector	2,000 00
A. A. De Gaspé	do	Roman Catholic	Assistant to Post Office Inspector	1,000 00
O. Fréchette	do	do	3rd Class Clerk	680 00
J. Bowin	do	do	Messenger	300 00
Railway Mail Clerks attached to Quebec Division.				
J. T. C. Murphy	Canadian	Roman Catholic	1st Class Clerk	960 00
H. A. Murphy	do	do	do	960 00
J. Garwin	do	do	2nd Class Clerk	800 00
J. L. Anctil	do	do	do	720 00
N. A. Beaudet	do	do	do	720 00
J. Deslaurièrs	do	do	do	640 00
G. Lapointe	do	do	3rd do	520 00
C. Vohl	do	do	Probationary	300 00
Inspector's Office, St. John, New Brunswick.				
John McMillan	Scotch	Church of Scotland	Post Office Inspector	2,000 00
Wm. Paisley	English	Church of England	Chief Clerk	1,200 00
W. C. Whittaker	Canadian	Methodist	Accountant	800 00
W. H. Black	do	Church of England	Clerk	700 00
C. A. Murray	do	Baptist	do	450 00
W. R. Avery	do	do	do	300 00
W. Bannister	English	Church of England	Messenger	350 00
Railway Mail Clerks attached to New Brunswick Division.				
D. W. Blizzard	Canadian	Methodist	3rd Class Clerk	480 00
J. A. M. Hunter	do	Baptist	Temporary	480 00
D. A. Esty	do	do	do	480 00
Inspector's Office, Halifax, Nova Scotia.				(N. S. Currency.)
A. Woodgate	English	Church of England	Post Office Inspector and Postmaster	2,432 88
T. M. Fassow	do	do	Assistant to Inspector and Postmaster	1,621 92
T. Southall	do	do	Clerk	816 96
J. B. Butler	do	do	do	304 12
W. Blanchard	Canadian	Church of Scotland	do	506 86

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
Inspector's Office, Halifax, Nova Scotia.	POST OFFICE DEPARTMENT.—*Continued.*			
Circulation Department.				(N.S. Currency.)
W. Small	Canadian	Wesleyan	Assistant Postmaster	810 96
B. W. Cochran	do	Church of England	Clerk	810 96
J. C. Campbell	do	do	do	810 96
A. Burnham	do	Methodist	do	506 86
A. Cunningham	do	do	do	506 86
T. W. DeWolf	do	Baptist	do	608 22
T. D. Story	do	Church of England	do	304 12
W. H. Chamberlain	do	do	do	304 12
W. H. Donovan	do	Roman Catholic	do	304 12
F. Huntingdon	do	Church of England	do	304 12
R. R. McMillan	do	Wesleyan	Messenger	405 48
C. Smith	do	do	Letter Carrier	405 48
M. Collins	do	Roman Catholic	do	405 48
T. Fitzgerald	do	do	do	405 48
H. Frider	do	Church of England	do	405 48
T. Wilson	do	do	do	405 48
S. Sanders	do	do	do	304 12
W. Craig	Scotch	do	Retired do	253 42
F. V. Tremaine	Canadian	do	2nd Class Rail'y Mail Cl'k.	608 22
T. L. Barnhill	do	Church of Scotland	do 3rd Class.	486 58
A. Doyle	do	Roman Catholic	do do	486 58
L. Parker	do	Church of England	do do	486 58
L. H. Thorne	do	do	Supt. M. O. Office	621 92
T. W. Creighton	do	do	Clerk	810 96
T. B. Gray	do	Roman Catholic	do	608 22
S. S. Thorne	do	Church of England	do	304 12
T. Curran	English	do	Messenger	506 86
London Post Office.				$ cts.
L. Lawless	Irish	Wesleyan	Postmaster	1,840 00
R. J. C. Dawson	Canadian	do	Assistant Postmaster	1,100 00
J. Garden	Scotch	Presbyterian	2nd Class Clerk	900 00
J. D. Sharman	Irish	Church of England	do	900 00
H. D. Dalton	Canadian	Wesleyan	3rd do	720 00
J. Hunter	Irish	New C. Methodist	do	600 00
J. McLaughlin	do	Roman Catholic	do	600 00
R. J. Mathews	do	Wesleyan	do	600 00
T. J. O'Meara	do	Roman Catholic	Probationary	300 00
E. Wilson	Canadian	Church of England	do	300 00
John Nicholls	English	do	Letter Carrier	pd. by fees
Martin O'Meara	Irish	Roman Catholic	Messenger	365 00
Hamilton Post Office.				
F. E. Ritchie	Canadian	Church of England	Postmaster	2,000 00
Henry Colbeck	English	do	Assistant Postmaster	1,100 00
Charles Howard	do	Wesleyan	2nd Class Clerk	1,100 00
Alfred Crisp	do	do	do	1,100 00
H. A. Eager	Irish	do	do	900 00
J. R. Eager	do	do	3rd do	800 00
G. H. Armstrong	United States	Church of England	do	800 00
Thomas Burns	Canadian	do	do	600 00
James Gordon	Scotch	do	do	600 00
G. B. Ferguson	do	Wesleyan	Probationary	300 00
George H. Mathews	Canadian	Church of England	do	300 00
Andrew Burns	Irish	Roman Catholic	Messenger	300 00
Benjamin Dunnett	English	Wesleyan	Letter Carrier	pd. by fees

STATEMENT of the Names, Origin, Creed, Positio and Pa of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
POST OFFICE DEPARTMENT.—*Continued.*				
Toronto Post Office.				
Joseph Lesslie	Scotch	Toronto Brethren	Postmaster	2,00
George H. Backers	Irish	Baptist	Assistant Postmaster	1,400 00
John H. Davis	do	Church of England	2nd Class Clerk	1,100 00
John Carruthers	Scotch	Free Church	do	1,100 00
Alfred Cooper	English	Toronto Brethren	do	1,020 00
Aylmer Langley	Irish	Church of England	do	1,020 00
Alfred Cooke	English	Toronto Brethren	do	1,020 00
Alfred Barley	do	Church of England	do	900 00
Joseph Saulter	Irish	Free Church	3rd do	720 00
John Forsyth	Scotch	do	do	800 00
A. Harstone	do	do	do	720 00
Henry Falkiner	Irish	Church of England	do	640 00
Donald P. Ross	Canadian	Christadelphian	do	640 00
Wm. Wright	English	Wesleyan	do	640 00
Henry Boulter	do	Church of England	do	600 00
Charles R. Butler	Canadian	do	do	600 00
Wm. London	do	Free Church	do	600 00
Augustus Webber	English	Church of England	do	600 00
B. M. Armstrong	Canadian	do	4th do	500 00
John Monaghan	Irish	Roman Catholic	do	500 00
George A. Ross	Canadian	Church of England	do	500 00
Benjamin Langley	do	Baptist	do	500 00
James A. Brodie	English	Disciple	do	500 00
John Egan	Irish	Roman Catholic	do	300 00
Christopher Beatty	Canadian	Church of England	do	300 00
Charles F. Smith	do	do	do	300 00
Peter Ross	Scotch	do	do	400 00
Robert Stephens	Canadian	do	Supt. Letter Carriers	500 00
John McClosky	Irish	Roman Catholic	Letter Carrier	440 00
John Ross	Scotch	Baptist	do	400 00
James Alston	English	None	do	400 00
J. Bazeley	do	Church of England	do	400 00
John Clode	do	Wesleyan	do	300 00
John Hudson	Irish	Church of England	do	300 00
Thomas Roddy	Canadian	do	do	300 00
J. Loughead	Irish	Free Church	do	300 00
Thomas Crotty	do	Baptist	Box Collector	300 00
John Hodkinson	English	Wesleyan	do	300 00
Joseph H. Roden	Irish	do	Housekeeper	380 00
Alexander Beaty	Canadian	Church of England	Porter	400 00
M. Shannon	do	Free Church	Temporary Letter Carrier	$1 per day
Kingston Post Office.				
Robert Deacon	Canadian	Church of England	Postmaster	1,840 00
Wm. Shannon	Irish	do	Assistant Postmaster	1,000 00
Alex. Maguire	do	do	3rd Class Clerk	940 00
John Kelly	do	Roman Catholic	do	760 00
Robert T. Burns	Canadian	Church of England	do	680 00
Robert Deacon, jr.	do	do	Probationary	300 00
H. H. Goodfellow	do	do	do	300 00
Patrick Lindsay	Irish	do	Letter Carrier	480 00
W. T. Laws	English	do	Messenger	300 00
Ottawa Post Office.				
G. P. Baker	English	Church of England	Postmaster	2,000 00
C. L. Stephens	Irish	do	Assistant Postmaster	1,000 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
POST OFFICE DEPARTMENT.—*Continued.*				
Ottawa Post Office.—Continued.				$ cts.
H. G. Dunlevie	English	Church of England	3rd Class Clerk	800 00
F. French	do	do	do	800 00
F. Hawkins	do	do	do	600 00
C. S. Scott	Canadian	Wesleyan	Not Classed	520 00
J. T. Bartram	do	Church of England	do	520 00
E. B. Bates	do	do	do	440 00
A. S. Philion	do	Roman Catholic	do	440 00
J. H. Pinhey	English	Church of England	do	400 00
E. S. McDermott	Canadian	Roman Catholic	Probationary	300 00
J. Bishop	do	Church of England	Temporary	260 00
G. W. Baker	do	do	do	240 00
C. Shaw	Irish	do	do	360 00
L. F. Cobet	Belgium	Es'd. C. of Scotland	Letter Carrier	360 00
E. J. O'Connor	Irish	Roman Catholic	do	300 00
T. Hartnedy	do	do	Temporary Messenger	300 00
Montreal Post Office.				
E. S. Freer	English	Church of England	Postmaster	2,000 00
B. McEvenne	Irish	Roman Catholic	Assistant Postmaster	1,400 00
M. Emery	Canadian	do	2nd Class Clerk	1,100 00
H. Huddell	English	Church of England	do	1,100 00
McD. Simpson	Scotch	Church of Scotland	do	1,100 00
M. Murphy	Irish	Roman Catholic	do	1,100 00
U. Benoit	Canadian	do	3rd do	800 00
J. McKeon	Irish	do	do	800 00
L. Malard	Canadian	do	do	800 00
J. T. Wright	English	Church of England	do	800 00
F. Pridham	do	do	do	760 00
S. Johnston	Scotch	Wesleyan	do	720 00
A. D'Amour	Canadian	Roman Catholic	do	680 00
V. Baillargeon	do	do	do	680 00
Thos. F. Larseneur	do	do	do	680 00
H. A. Bourret	do	do	do	680 00
Thos. Forsyth	Scotch	Church of England	do	680 00
J. L. Palmer	English	Roman Catholic	do	680 00
David Robinson	Irish	Church of England	do	680 00
H. A. Lemieux	Canadian	Roman Catholic	do	640 00
W. Fenton	Irish	do	do	640 00
J. St. Amour	Canadian	do	do	600 00
J. C. Simms	Scotch	Baptist	do	600 00
J. O. P. Scully	Irish	Roman Catholic	do	600 00
D. O'Connor	do	do	do	600 00
F. X. Beauregard	Canadian	do	do	600 00
L. Pepin	do	do	do	600 00
John J. Drew	Irish	do	do	600 00
O. Clement	Canadian	do	do	600 00
A. Loftus	Irish	do	do	600 00
T. Desnoyers	Canadian	do	do	600 00
H. Goyette	do	do	do	600 00
A. Smith	English	Wesleyan	4th Class Clerk	500 00
J. O'Brien	Irish	Roman Catholic	do	500 00
J. Senez	Canadian	do	do	360 00
F. Swift	English	do	Probationary	300 00
E. Meyer	Canadian	do	do	480 00
J. E. Barcelo	do	do	do	300 00
J. A. C. Macpherson	Scotch	Church of Scotland	Supernumerary Clerk	750 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
		POST OFFICE DEPARTMENT.—*Continued.*		
Montreal Post Office.—Continued.				$ cts.
P. O'Reilly	Irish	Roman Catholic	Letter Carrier	560 00
A. A. Auger	Canadian	do	do	560 00
O. Filiatrault	do	do	do	480 00
R. J. Arless	English	Church of England	do	480 00
A. Dowd	Irish	Roman Catholic	do	480 00
R. Duncan	do	Church of England	do	480 00
E. D. Dowd	do	Roman Catholic	do	300 00
T. Giroux	Canadian	do	do	300 00
P. Lapointe	do	do	do	300 00
F. X. Lefebvre	do	do	do	300 00
A. Dufresne	do	do	do	300 00
J. B. Davoust	do	do	do	300 00
J. Maher	Irish	do	Box Collector	300 00
P. Leclerc	do	do	do	300 00
P. Fennelly	do	do	do	300 00
J. Odell	English	Wesleyan	do	300 00
P. Paterson	Scotch	Church of Scotland	Office Keeper	384 00
M. Mullin	Irish	Roman Catholic	Messenger	245 00
DeV. V. De Grand Pré	Canadian	do	Night Watchman	360 00
Quebec Post Office.				
P. G. Hout	Canadian	Roman Catholic	Post Master	2,000 00
R. G. Patton	do	Church of England	Assistant Post Master	1,400 00
J. E. Bolduc	do	Roman Catholic	1st Class Clerk	1,200 00
P. Gingras	do	do	3rd Class Clerk	800 00
John Grey	Irish	do	do do	800 00
B. Lacasse	Canadian	do	do do	800 00
C. Chamberland	do	do	do do	800 00
O. Biron	do	do	do do	800 00
D. Vaughan	do	do	do do	800 00
W. Handford	do	do	4th Class Clerk	500 00
H. Huot	do	do	Probationary	300 00
W. Newman	do	do	do	360 00
E. Huot	do	do	do	300 00
A. Auger	do	do	Letter Carrier	480 00
P. Neville	Irish	do	do	480 00
L. A. Rochette	Canadian	do	do	360 00
F. X. Labbé	do	do	do	360 00
O. Plamondon	do	do	Office Keeper & Messenger	300 00
J. Evarts	do	do	Assistant Messenger	300 00
Fredericton, N.B., Post Office.				
A. S. Phair	Canadian	Church of England	Post Master	1,200 00
H. J. Thorne	English	Wesleyan	Senior Clerk	800 00
J. Cameron	Canadian	Church of Scotland	Junior do	400 00
D. Tobin	do	Roman Catholic	Letter Carrier	p'd by fees
St. John, N.B., Post Office.				
John Howe	Canadian	Church of England	Post Master	2,000 00
James Woodrow	Irish	Congregational	Assistant Post Master	800 00
H. C. Frink	Canadian	Church of England	Clerk	800 00
M. J. Potter	do	Roman Catholic	do	800 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
POST OFFICE DEPARTMENT.—*Continued.*				
St. John, N. B., Post Office. —Continued.				$ cts
H. P. Otty	Canadian	Church of England	Clerk	600 00
R. C. McIntyre	do	Covenanter	4th Class Clerk	400 00
J. A. Armstrong	do	do	do do	400 00
A. McNicol	do	Church of England	do do	400 00
D. H. Waterbury	do	Baptist	do do	300 00
J. McA. Hunter	do	do	do do	300 00
J. S. Flagler	do	do	Temporary Clerk	300 00
J. Leetch	Irish	Presbyterian	Office Keeper	400 00
James Leetch	do	Church of the	Letter Carrier	p'd by fees
R. McLaughlin	Canadian	Maritime Prov-	do	
Wm. Young	Irish	inces	do	
POST OFFICE DEPARTMENT.—SUPPLEMENTARY RETURN.				
John Graham	Canadian	Church of England	2nd Class Clerk	720 00
W. Blanchard	do	Presbyterian	3rd Class Clerk	600 00
J. F. Ruttan	do	Church of England	do	640 00
G. G. Falconer	do	Presbyterian	Probationary	300 00
W. L. Blair	do	Church of England	do	300 00
Jno. Hopkirk	do	Presbyterian	do	300 00
A. Stewart	Irish	Church of England	do	300 00
W. H. Egleson	Canadian	do	do	300 00
D. Morris	do	Roman Catholic	do	300 00
C. B. Brodie	Australian	Church of England	do	300 00
E. A. D. Jones	Bermuda	do	do	300 00
R. A. Salter	English	do	Temporary	$1.50 per diem.
G. R. White	Canadian	do	do	
J. C. Jenkins	do	Wesleyan	do	
Jas. Fortier	do	Church of England	do	
J. C. Bonner	English	Roman Catholic	do	
Ocean Mail Service.				
C. H. E. Tilstone	English	Church of England	Ocean Mail Clerk	*36
Chief Inspector's Office. (No addition to Staff.)				
Inspector's Office, London Division.				
W. H. Flood	Canadian	Church of England	2nd Class	720 00
S. Burnham	do	do	3rd do	520 00
Railway Mail Clerks attached to London Division. (No addition to Staff.)				

*$50 a round trip in addition to salary.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
POST OFFICE DEPARTMENT.—(SUPPLEMENTARY RETURN.)—*Continued.*				
Inspector's Office, Toronto Division.				$ cts.
A. B. Campbell	English	Church of England	Probationary	300 00
Railway Mail Clerks attached to Toronto Division.				
M. E. Kelly	Canadian	Roman Catholic	3rd Class Clerk	480 00
J. W. Rooney	United States	do	do	480 00
E. F. Johnson	Canadian	do	do	480 00
L. V. Byrne	Irish	do	do	480 00
S. McLean	do	W. Methodist	do	480 00
Wm. Prest	English	do	do	480 00
S. Jones	Canadian	Church of England	do	480 00
J. Street	do	do	Mail Porter	480 00
Inspector's Office, Kingston Division.				
(No addition to Staff.)				
Railway Mail Clerks attached to Kingston Division.				
D. Maloney	Irish	Roman Catholic	3rd Class Clerk	480 00
Inspector's Office, Montreal Division.				
(No addition to Staff.)				
Railway Mail Clerks attached to Montreal Division.				
J. P. Chillas	Canadian	Roman Catholic	3rd Class Clerk	480 00
A. Lachapelle	do	do	do	480 00
N. McLellan	do	W. Methodist	do	480 00
C. Hurlbut	do	Church of England	do	480 00
J. D. Anderson	United States	Presbyterian	do	480 00
Inspector's Office, Quebec Division.				
Cyprien Vohl	Canadian	Roman Catholic	4th Class Clerk	400 00
Railway Mail Clerks attached to Quebec Division.				
Eugene Blondeau	Canadian	Roman Catholic	2nd Class Clerk	600 00
B. F. Gaudry	do	do	3rd Class Clerk	480 00
H. J. Kimlin	do	do	do	480 00
Donat Blondeau	do	do	do	480 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
POST OFFICE DEPARTMENT.—(SUPPLEMENTARY RETURN.)—*Continued.*				
Inspector's Office, St. John, New Brunswick.				$ cts.
W. D. Campbell.....	Canadian.....	Roman Catholic ..	Temporary Clerk	300 00
Railway Mail Clerks attached to New Brunswick Division.				
C. Ward.....	Canadian.....	Roman Catholic ..	Railway Mail Clerk	480 00
Jos. Thompson.....	do	Methodist	do	480 00
G. J. Ryan	do	do	do	480 00
Inspector's Office, Halifax, Nova Scotia.				
Issac Le Vesconte	Canadian.....	Church of England	3rd Class Clerk	480 00
E. A. Bent.....	do	Methodist	do	480 00
Circulation Department, Halifax, Nova Scotia.				
John Flowers	Canadian.....	Presbyterian	Probationary	300 00
Jno. Wilson.....	do	Methodist	Letter Carrier	300 00
H. S. Laurilliard.....	do	Church of England	do	300 00
London Post Office. (No addition to Staff.)				
Hamilton Post Office.				
Geo. W. Bull.....	Canadian.....	Church of England	Probationary	300 00
D. J. Macqueen..	Scotch	do	do	300 00
Wm. S. Lynch	Canadian.....	Presbyterian	do	300 00
Toronto Post Office.				
A. T. Middleton.....	Canadian.....	Church of England	Probationary	300 00
R. Winstanley	do	Disciple	do	300 00
Chas T. Bell	do	Church of England	do	300 00
J. Moerchfelder	French.....	do	3rd Class Clerk	600 00
E. R. Hoogs	Canadian.....	do	Letter Carrier	300 00
J. M. Shannon.....	do	Presbyterian.....	do	300 00
Paul Stewart..	Irish	Baptist.....	Box Collector.....	300 00
J. Callaghan	do	Roman Catholic ..	House Keeper	380 00
Jas. Carruthers	Canadian.....	Presbyterian.....	Temporary	300 00
Geo. Crane.....	Irish	do	do	300 00
Kingston Post Office.				
Henry Dunbar.....	Irish	Church o England	Messenger.....	300 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
POST OFFICE DEPARTMENT.—(SUPPLEMENTARY RETURN.)—*Continued.*				
Ottawa Post Office.				$ cts.
F. Roberge	Canadian	Roman Catholic	Probationary	300 00
C. J. Tasker	English	Church of England	do	300 00
P. A. Maingy	Canadian	do	do	300 00
V. Daze	do	Roman Catholic	Letter Carrier	300 00
B. Huckell	English	Church of England	do	300 00
E. H. Williams	do	do	Temporary	@ $1.50 per diem.
Montreal Post Office.				
J. A. Aylmer	English	Episcopalian	Probationary	300 00
Hy. McKenzie	Canadian	Roman Catholic	do	300 00
C. Lefebvre	do	do	Letter Carrier	300 00
J. B. Plante	do	do	do	300 00
Jos. Melançon	do	do	do	300 00
A. S. Higgins	Scotch	do	do	300 00
P. R. Madden	Irish	do	do	300 00
Jos. Beaudoin	Canadian	do	do	300 00
Frs. Menard	do	do	do	300 00
P. Rottot	do	do	do	300 00
L. Lefebvre	do	do	do	300 00
J. Brennan	Irish	do	Letter Collector	300 00
P. Leahy	do	do	do	300 00
Ig. St. Amour	Canadian	do	Night Watchman	360 00
Quebec Post Office.				
Wm. White	English	Roman Catholic	Probationary	300 00
J. G. Poston	do	Protestant	do	300 00
U. Vezina	Canadian	Roman Catholic	Letter Carrier	300 00
J. McClutchy	Irish	do	do	300 00
Fredericton, N. B., Post Office. (No addition to Staff.)				
St. John, N. B., Post Office.				
W. A. Black	Canadian	Church of England	3rd Class Clerk	800 00
Geo. Bell	Irish	Ref'd. Presbyterian	Office Keeper	400 00
PRIVY COUNCIL OFFICE.				
William Henry Lee	Irish Canadian	Anglican	Clerk Privy Council.	2,600 00
William A. Himsworth	Anglo-Canadian	do	Asst. Clerk Privy Council.	2,150 00
Joseph Olivier Côté	French Canadian	Roman Catholic	1st Class Clerk	1,550 00
Frederick H. Himsworth	Anglo-Canadian	Anglican	1st Class Supernumerary	1,350 00
Henry Alexander	do	do	Junior 2nd Class	1,000 00
William Horace Lee	Irish Canadian	do	do do	800 00
Michael Naughton	Irish	Roman Catholic	Door Keeper and Messeng'r	600 00
Joseph Cairns	do	Anglican	Messenger	450 00
Patrick Batterton	do	Roman Catholic	do	450 00
Benoni Grenier	French Canadian	do	do	$1.25 per diem.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
INLAND REVENUE DEPARTMENT—(*Inside Service*).				
A. Brunel	English	Episcopalian	Commissioner	2,600 00
R. Shaw	English Canadian	do	Clerk of Correspondence	1,600 00
E. Miall, Jr	English	Independent	Accountant	1,600 00
J. F. Brown	do	Episcopalian	Clerk	1,200 00
F. Measam	do	do	do	1,100 00
R. Nettle	do	do	do	1,000 00
R. Borradaile	do	do	do	1,100 00
A. Begg	Scotland	Scotch Church	do	1,200 00
Wm. Himsworth, Jr	English Canadian	Episcopalian	do	550 00
E. D. Clark	English	do	do	950 00
M. Battle	Irish	Roman Catholic	do	850 00
B. H. Seakles	New Brunswicker	Baptist	do	450 00
Neil Stewart	Canadian	Scotch Church	do	800 00
H. A. Ford	English	Episcopalian	do	700 00
F. R. E. Campeau	French Canadian	Roman Catholic	do	800 00
John Fowler	English	Methodist	Messenger	450 00
George Fowler	do	do	do	330 00
INLAND REVENUE OF THE DOMINION GOVERNMENT—(*Outside Service,*) ONTARIO.				
DISTRICT OF LONDON.				
Windsor Division.				
Charles E. Romain	Canadian	Episcopalian	Inspector	1,600 00
Charles G. Fortier	do	do	Deputy Collector	800 00
George W. Foot	Irish	do	do	800 00
Robert N. Elliott	Canadian	do	do	400 00
Charles T. Dupont	do	do	Book-Keeper	800 00
Thomas Cross	Irish	do	Exciseman	500 00
William Gill	do	Presbyterian	do	600 00
W. J. Gerald	Canadian	Episcopalian	do	700 00
Wm. F. Metcalfe	do	do	do	600 00
Sarnia Division.				
Robert B. Somerville	Scotch	Presbyterian	Collector	1,200 00
Peter McGlashan	do	do	do	800 00
John Shields	do	do	Exciseman	700 00
Townsend S. Vidal	English	Episcopalian	do	600 00
London Division.				
Peter McClary	American	W. Methodist	Collector	1,200 00
Daniel Hanvey	Irish	Presbyterian	Assistant Collector	400 00
W. H. Armstrong	do	do	do	500 00
H. Hunter	do	Episcopalian	Exciseman	700 00
Wm. Moore	do	do	do	700 00
Richard B. Dixon	Canadian	do	do	700 00
James Magee Yates	Irish	Methodist	do	500 00
H. A. Smith	Canadian	Episcopalian	Book-Keeper	700 00
Goderich Division.				
Chas. Widder	English	Episcopalian	Collector	800 00
Wm. Withers	do	do	do	500 00
Wm. Smith	Irish	do	Deputy Collector	400 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Outside Service.*)—ONTARIO.—*Continued.*				
Goderich Division.—Continued.				$ cts.
Alex. Cavan	Canadian	Episcopalian	Exciseman	500 00
Geo. V. Elwood	Irish	do	do	500 00
Paris Division				
D. W. Hart	English	Episcopalian	Collector	1,200 00
John McWhinnie	Scotch	Presbyterian	Exciseman	600 00
R. F. Nelles	Canadian	Episcopalian	Deputy Collector	800 00
John Patton	Irish	W. Methodist	Exciseman	500 00
Thomas C. J. Racey	Canadian	Episcopalian	do	700 00
W. P. Master	do	do	do	500 00
Guelph Division.				
James Gow	Scotch	Presbyterian	Collector	1,200 00
Donald McLean	do	do	Deputy Collector	800 00
Geo. Rennie	do	do	Exciseman	700 00
John White	Canadian	Methodist	do	700 00
James H. Kenning	do	Presbyterian	do	700 00
James D. Kennedy	Irish	do	do	700 00
John McD. Campbell	Canadian	do	do	600 00
John W. Petrie	Scotch	Episcopalian	do	500 00
Charles T. Dickson	Canadian	Presbyterian	do	600 00
M. T. McCord	Irish	do	do	600 00
Geo. Kirk	Canadian	do	do	600 00
DISTRICT OF TORONTO.				
Hamilton Division.				
Henry Godon	English	Episcopalian	Inspector	1,600 00
William Patton	Irish	Presbyterian	Collector	1,200 00
John Stewart	Canadian	do	Exciseman	700 00
H. T. Crawford	do	Methodist	do	600 00
Andrew Stewart	do	Roman Catholic	do	600 00
Andrew McPherson	Scotch	Presbyterian	do	600 00
John Jagoe	Irish	Episcopalian	do	500 00
John Thompson	Scotch	Presbyterian	Ferryman	300 00
S. F. Ross	English	Episcopalian	Exciseman	700 00
St. Catherines Division.				
James Seymour	Irish	Methodist	Collector	1,200 00
John G. Conway	do	Roman Catholic	Assistant Collector	800 00
James Kinnear	Scotch	Presbyterian	do	600 00
Algoma Division.				
Geo. A. Ironside	Canadian	Episcopalian	Collector	400 00
Toronto Division.				
Geo. P. Dickson	Scotch	Presbyterian	Collector	1,600 00
James Shaw	do	do	Deputy Collector	1,200 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Outside Service.*)—ONTARIO.—*Continued.*				
Toronto Division.—Continued.				$ cts.
John Morrow	Canadian	W. Methodist	Deputy Collector	800 00
A. D. Macdonell	do	Roman Catholic	Assistant Collector	700 00
R. A. Hartley	Scotch	Presbyterian	Deputy do	600 00
W. M. Gorrie	do	do	Exciseman	800 00
Samuel Greey	English	Baptist	do	700 00
Paul M. Robins	do	W. Methodist	do	700 00
John Spence	Irish	Episcopalian	do	700 00
S. M Sanford	Canadian	do	do	500 00
James M. Rogerson	Scotch	Presbyterian	do	700 00
Geo. A. Rogers	English	Episcopalian	Messenger	400 00
James Bennett	do	do	Exciseman	600 00
M. C. Stratton	Canadian	Methodist	do	500 00
C. W. Walker	do	do	do	500 00
Fred Lowe	do	Episcopalian	do	500 00
Collingwood Division.				
W. J. Graham	Canadian	Episcopalian	Acting Collector	600 00
Peterborough Division.				
Thomas White	Irish	Episcopalian	Collector	500 00
James B. Knowlson	Canadian	do	Deputy Collector	400 00
Cobourg Division.				
Wm. Graveley	English	Episcopalian	Collector	900 00
John Wilson	Irish	Methodist	Deputy Collector	900 00
Francis Murphy	do	Roman Catholic	Exciseman	600 00
DISTRICT OF KINGSTON.				
Belleville Division.				
A. N. Striker	Canadian	Episcopalian	Inspector	1,600 00
E. R. Benjamin	do	do	Collector	1,200 00
W. F. Gouin	do	Roman Catholic	Exciseman	700 00
W. L. Hamilton	do	Episcopalian	do	700 00
E. A. Evershed	English	do	Deputy Collector	400 00
Kingston Divison.				
A. Thibodo	Canadian	Presbyterian	Collector	1,200 00
Fleming Rowland	do	do	Exciseman	700 00
P. B. Macnamara	do	Roman Catholic	do	500 00
Thos. Alexander	Irish	Presbyterian	do	500 00
Perth Division.				
Daniel Kellock	Canadian	Baptist	Acting Collector	600 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Outside Service.*)—ONTARIO.—*Continued.*				$ cts.
Ottawa Division.				
Alexander Graham	Scotch	Methodist	Collector	800 00
Jno. M. Henry	Irish	Episcopalian	Exciseman	700 00
G. S. O'Brien	Canadian	do	do	500 00
Prescott Division.				
S. B. Merrill	Canadian	Episcopalian	Collector	1,200 00
Geo. C. Longley	do	do	Deputy Collector	300 00
John Ford	Irish	Roman Catholic	Exciseman	600 00
W. J. Geralds				100 00
Geo, W. Brown	English	Episcopalian	Exciseman	500 00
Cornwall Division.				
Neil McLean	Canadian	Presbyterian	Collector	500 00
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Outside Service*).—QUEBEC.)				
DISTRICT OF MONTREAL.				
Montreal Division.				
Raphael Bellemare	French Canadian	Roman Catholic	Inspector	1,600 00
Philip Durnford	English	Episcopalian	Collector	1,600 00
Louis G. Fanteaux	French Canadian	Roman Catholic	do	1,200 00
William Hastie	Scotch	Presbyterian	Assistant Collector	700 00
Louis Blanchard	French Canadian	Roman Catholic	do	600 00
John Dodd	English	Episcopalian	Book Keeper	800 00
Edmond DuFoy	French Canadian	Roman Catholic	Exciseman	700 00
Charles H. Levoux	do	do	do	700 00
Raymond Richard	do	do	do	700 00
Louis J. Vincent	do	do	do	700 00
François Dugnet	do	do	do	600 00
Jacques Villeneuve	do	do	do	600 00
John Pickett	English	Episcopalian	do	600 00
Chas. Barker	do	Presbyterian	do	500 00
Dugald McDonald	Canadian	Roman Catholic	do	500 00
Achille DuFoy	do	do	do	500 00
Beauharnois Division.				
A. McEachern	French Canadian	W. Methodist	Collector	400 00
St. John's Division.				
Pierre Regnier	French Canadian	Roman Catholic	Collector	400 00
Terrebonne Division.				
C. J. Leclaire	French Canadian	Roman Catholic	Collector	400 00
Adolphe Delisle	do	do	Deputy Collector	400 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Outside Service.*)—QUEBEC.—*Continued.*				
St. Hyacinthe Division.				$ cts.
Charles A. Boivin	French Canadian	Roman Catholic	Collector	400 00
Aimé Roy	do	do	Deputy Collector	400 00
Sherbrooke Division.				
J. Griffiths	Irish	Roman Catholic	Collector	400 00
L. A. Perkins	Canadian	Episcopalian	Deputy Collector	400 00
Three Rivers Division.				
B. Lasalle	French Canadian	Roman Catholic	Collector	400 00
DISTRICT OF QUEBEC.				
Quebec Division.				
James B. Lemoine	French Canadian	Roman Catholic	Inspector	1,600 00
J. E. Fortier	do	do	Collector	1,200 00
M. McNamara	Irish	do	Exciseman	600 00
J. H. Cahill	do	do	Accountant	700 00
J. Rouleon	Canadian	do	Exciseman	600 00
George Bourassa	do	do	do	500 00
Chas. Belanger				500 00
James Courtney	Irish	Episcopalian	Extra Clerk	600 00
J. D. Stewart				500 00
George Neilan	Irish	Roman Catholic	Exciseman	500 00
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Outside Service.*)—NOVA SCOTIA.				
DISTRICT OF NOVA SCOTIA.				
Halifax Division.				
Archibald Patterson	Nova Scotian	Presbyterian	Inspector	1,600 00
Samuel Tupper	do	do	Collector	1,200 00
Angus McLeod	do	do	Exciseman	700 00
John D. Nash	do	Methodist	do	500 00
B. H. Blanchard	do	Presbyterian	do	500 00
Patrick Hagerty	Irish	Roman Catholic	do	500 00
Yarmouth Division.				
J. W. H. Rowley	English	Episcopalian	Collector	500 00
James Grant				500 00
Pictou Division.				
W. J. Loraine	Nova Scotian	Presbyterian	Collector	800 00
Cape Breton Division.				
Lachlin Robertson	Scotch	Presbyterian	Collector	500 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Outside Service.*)—NEW BRUNSWICK.				
DISTRICT OF NEW BRUNSWICK.				$ cts.
Miramichi Division.				
Thomas Hanford	New Brunswicker.	Episcopalian	Inspector	1,600 00
J. T. Griffin	do	Roman Catholic	Collector	800 00
St. John Division.				
R. W. Crookshanks	New Brunswicker.	Episcopalian	Collector	1,200 00
Geo. Travis	do	do	Exciseman	700 00
H. F. Stephens	do	do	do	500 00
John E. Ganong	do	Methodist	do	700 00
Thos. Potts	do	do	do	500 00
John Frederickson	do	do	do	500 00
St. Stephen Division.				
Henry Hutton	New Brunswicker.	Methodist	Collector	300 00
Dominion.				
John Davis	Canadian	Roman Catholic	Assistant Inspector of Distilleries	1,200 00
Magdalen Division.				
J. J. Fox	Canadian	Roman Catholic	Preventive Officer	300 00
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Cullers' Service.*)				
Quebec Division.				
William Quinn	Irish	Roman Catholic	Supervisor	2,000 00
Alexander Fraser	do	Baptist	Book Keeper	1,600 00
Thomas J. Walsh	do	Roman Catholic	Cashier	1,200 00
Thomas Quinn	do	do	Specification Clerk	800 00
Pierre Millar	French Canadian.	do	do	800 00
Thomas Power	Irish	do	do	800 00
Edward Duggan	do	do	do	600 00
Wolfred Launière	French Canadian.	do	do	600 00
James Prendergast	do	do	do	725 00
Joseph E. Belland	do	do	do	500 00
F. X. Drouin	do	do	do	500 00
Z. Levasseur	do	do	do	500 00
James Foley	Irish	do	do	500 00
John Tiernay	do	do	Messenger	400 00
Montreal Division.				
C. E. Belle	French Canadian.	Roman Catholic	Deputy Supervisor	500 00
Jean C. Coursolles	do	do	Book Keeper	*100 00
Sorel Division.				
F. X. Belland	French Canadian.	Roman Catholic	Clerk	100 00

*Paid $100 for the Season.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Slide and Boom Service.*)				
Ottawa Division.				$ cts
A. J. Russell	Scotch	Christian	Collector of Slide Dues and Crown Timber Agent	1,840 00
Chas. T. McNutt	Irish	Presbyterian	Assistant	1,200 00
James Ritchie	Canadian	do	Senior Clerk	700 00
A. J. Russell	do	Christian	Acting Draughtsman	600 00
Edward T. Smith	do	Roman Catholic	Clerk	550 00
John Cameron	Scotch	Methodist	Timber Counter	620 00
Henry Codd	English	Episcopalian	Clerk	550 00
Quebec Division.				
McLean Stewart	Scotch	Presbyterian	Collector of Slide Dues and Crown Timber	1,800 00
William O'Kane	Irish	Roman Catholic	Assistant	1,200 00
John Mackay	Scotch	Presbyterian	Clerk	800 00
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Canal Service.*)				
Inspection of Canals.				
Robert Bell	English	Presbyterian	Inspector	1,400 00
Beauharnois Division.				
George Ellis	English	Episcopalian	Collector	750 00
Port Colborne Division.				
W. A. Rooth	Canadian	Episcopalian	Collector	1,400 00
J. T. Scholfield	do	Presbyterian	Clerk	500 00
Gordon Wilson	do	Episcopalian	Clerk and Night Officer	300 00
John E. Leggett	do	do	Clerk	600 00
Chambly Division.				
H. D'Archambault	French Canadian	Roman Catholic	Collector	1,100 00
N. Berger	do	do	Assistant Collector	400 00
Cornwall Division.				
James A. Phelan	Canadian	Roman Catholic	Collector	600 00
Dunnville Division.				
Thomas L. Tipton	English	W. Methodist	Collector	750 00
Edwardsburg Division.				
R. T. McMillan	Canadian	Roman Catholic	Collector	750 00
J. Reid	Irish	Presbyterian	Preventive Officer	400 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Canal Service.*)—*Continued.*				
Port Dalhousie Division.				$ cts.
John J. Clark.....	Canadian.....	Episcopalian.....	Collector	1,000 00
Hamilton Division.				
John Thompson	Scotch.....	Presbyterian.....	Ferryman	300 00
Lachine Division.				
Joseph Dubreuil.....	French Canadian ..	Roman Catholic ..	Sub-Collector.....	1,000 00
John O'Neill	Canadian.....	do ..	Clerk	700 00
Ottawa Division.				
George A. Carman.....	Canadian....	Episcopalian.....	Collector	600 00
Port Robinson Division.				
James McCoppin.....	Irish	Episcopalian.. ...	Collector	720 00
St. Ours Lock Division.				
Jules LeBœuf	French Canadian .	Roman Catholic ..	Collector	400 00
St. Johns Division.				
John Brennan.....	Irish	Roman Catholic ..	Collector.....	720 00
St. Ann's Lock Division.				
John Barrett	Irish	Roman Catholic ..	Collector	700 00
St. Catherines Division.				
James Clark	Canadian.....	Episcopalian.....	Clerk	200 00
Port Maitland Division.				
Thomas Galbraith.....	Canadian.....	Presbyterian.....	Collector	500 00
Montreal Division of Lachine Canal.				
Alfred Gough	English	Episcopalian.....	Collector	2,080 00
Brian Hayes	Irish	Roman Catholic ..	Chief Clerk.....	1,000 00
P. C. Lacine	French Canadian .	do ..	Superintendent	1,000 00
S. H. Bouchette	do .	do ...	Assistant Clerk.....	750 00
G. W. Ross	Irish	W. Methodist	do	750 00
Charles Mougeon	French Canadian .	Roman Catholic ..	Wharfinger.....	600 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

Names.	Origin.	Creed.	Position.	Pay per annum.
INLAND REVENUE OF THE DOMINION GOVERNMENT.—(*Canal Service.*)—*Continued.*				
Montreal Division of Lachine Canal.—Continued.				$ cts.
Thomas McNally	Irish	Roman Catholic	Warehouseman	$1.50 per day.
A. Campbell	Scotch	Baptist	Assistant Clerk	$1.50 per day.
Pierre Larvis	French Canadian	Roman Catholic	Mill Keeper	$20 per month.
DEPARTMENT OF PUBLIC WORKS.				
T. Trudeau	French Canadian	Roman Catholic	Deputy of the Minister	3,500 00
F. Braun	do	do	Secretary, Chief Clerk	2,050 00
T. B. French	English	Church of England	Correspond'e, Sr. 2nd Class	1,150 00
D. Carey	Irish	Roman Catholic	do Jr. do	1,000 00
W. J. Tilley	English	Church of England	do do do	700 00
H. A. Fissiault	French Canadian	Roman Catholic	Law Matters, 1st Class	1,500 00
F. H. Ennis	Irish do	do	Journal & Records, Jr. 2nd	1,000 00
G. Verret	French do	do	do do	750 00
J. R. Arnold	British do	Church of England	do do	850 00
J. F. N. Bonneville	French do	Roman Catholic	do do	1,100 00
J. Baine	Scotch	Church of Scotland	Book-Keeping, 1st Class	1,700 00
O. Dionne	French Canadian	Roman Catholic	do Jr. 2nd Class	1,000 00
R. McG. Moffatt	Nova Scotian	Church of England	do do	800 00
J. W. Harper	English	do	Paymaster, Senior do	1,530 00
S. McLaughlin	Irish	Swedenborgian	Photographer & Gen. Service. } Jr. 2nd.	1,060 00
L. Lefebvre	French Canadian	Roman Catholic	Gen. Service, Probationary	300 00
John Page	Scotch	Free C. Presbyter'n	Chief Engineer	3,240 00
F. P. Rubidge	English	Church of England	Assistant Engineer	2,400 00
G. F. Baillairgé	French Canadian	Roman Catholic	Engineer, 1st Class	1,800 00
T. Monro	Irish	Church of England	do do	1,680 00
J. E. Boyd	cotch Canadian	do	do do	1,680 00
J. H. Rowan	Irish	do	do do (Sup'ry)	1,350 00
T. Guerin	do	Roman Catholic	do Senior 2nd Class.	1,150 00
E. H. Parent	French Canadian	do	do do do	1,150 00
J. LeB. Ross	Scotch do	Church of England	do do do	1,150 00
C. McCarthy	Irish	Roman Catholic	do and Maps do	1,150 00
C. E. Michaud	French Canadian	do	do Junior 2nd	950 00
J. L. R. Stoekel	Alsacian	do	do do	850 00
J. Deslauriers	French Canadian	do	Messenger	500 00
H. Potvin	do	do	do	500 00
M. Walsh	Irish	do	do	500 00
Lachine Canal.				
J. G. Sippell	American	Protestant	Resident Engineer	2,240 00
Wm. Horsnell	English	do	Clerk	800 00
M. Conway	Irish	Roman Catholic	Superintendent	1,000 00
T. Hewitt	do	do	Paymaster	1,600 00
T. O'Neill	do	do	Lockmaster	360 00
Thomas John	English	Protestant	do	360 00
Pat. Redmond	Irish	Roman Catholic	do	360 00
John Hughes	Irish Canadian	do	do	360 00
M. Fitzpatrick	Irish	do	do	360 00
L. Franklin	do	do	Bridge Keeper	340 00 and h. rent

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
		DEPARTMENT OF PUBLIC WORKS.—*Continued.*		
Lachine Canal.—Continued.				$ cts.
H. McReavy	Irish	Roman Catholic	Bridge Keeper	340 00
M. Dowling	do	do	do	340 00 $40 h. rent
R. Newman	do	do	do	340 00
L. Simard	French Canadian	do	do	280 00
James Low	Scotch	Protestant	do	340 00
John Neagle	Irish	Roman Catholic	Boom Master	340 00
John Keliher	do	do	Assistant Bridge Keeper	$328 50 or 90c per day
John Moore	do	do	Messenger and Storeman	$1 per day in sum'er. 90c per day in winter.
Pat. Fitzpatrick	do	do	Assistant Bridge Keeper	
Arthur O'Neill	do	do	Lock Laborer	
James Doyle	do	do	do	
J. Tynen	do	do	do	
M. Ainwright	do	do	do	
Robert Reilly	do	Protestant	do	
Jas. Kennedy	do	Roman Catholic	do	
Wm. Struthers	Scotch	Protestant	do	$1 00 per day.
Wm. O'Brien	Irish	Roman Catholic	do	
Joseph Deschamps	French Canadian	do	do	
S. J. O'Sullivan	Irish	do	do	
J. Townsley	do	Protestant	do	
R. Gamble	do	do	do	
M. Powell	do	Roman Catholic	do	
J. Carroll	do	do	Assistant Bridge Keeper	
Wm. Murphy	Irish Canadian	do	do do	
T. McLaughlin	Irish	do	Carpenter	$1 30 per day.
Francis Pare	French Canadian	do	do	
J. Bennett	Irish do	do	do	
J. Costello	Irish	do	Foreman Carpenter	$1 75 per day.
W. McNown	English, from I. of Man	Protestant	do Repairs	$2 per day
H. Gairn	Irish	Roman Catholic	Diver and Laborer	$1 50 per day in su'r. $1 per day in winter.
M. Tierney	do	do	Lock Laborer	$1 per day
Jas. Ainwright	Scotch	do	do	$1 do
Alex. Cockburn	Irish	Protestant	Captain, Dredge No. 1	$60 per mo
E. McMullin	do	Roman Catholic	Engineer, Steam Dredge	$60 per mo
Beauharnois Canal.				
P. Laurencel	French Canadian	Roman Catholic	Superintendent	1,000 00
G. Ellis	English	Protestant	Paymaster	100 00
Wm. Reed	English Canadian	Roman Catholic	Lock Master	340 00
Pre. Lafort	French Canadian	do	do	340 00
O. Bourbonnais	do	do	do	340 00
Jos. L. Godin	do	do	do	340 00
A. Boyer	do	do	do	340 00
S. Smith	English	Protestant	do	340 00
P. N. Trottier	French Canadian	Roman Catholic	do	340 00
G. Denault	do	do	do	340 00
E. Lefebvre	do	do	do	340 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Beauharnois Canal,—Continued.				$ cts.
L. Leduc	French Canadian	Roman Catholic	Bridge Keeper	280 00
P. Barrett	do	do	do	
P. Chatigny	do	do	Lock Laborer	
M. Langlois	do	do	do	
H. Martin	do	do	do	
M. Roy	do	do	do	
J. Auger	do	do	do	
F. Perron	do	do	do	
N. Patenaude	do	do	do	
M. Hénault	do	do	do	
T. Lefebvre	do	do	do	
Paul Roy	do	do	do	$1 00 per day.
N. Lebœuf	do	do	do	
F. Sénécal	do	do	do	
P. Ledoux	do	do	do	
D. Perron	do	do	do	
F. Charrette	do	do	do	
G. Leduc	do	do	do	
O. Chevallier	do	do	do	
N. Deschamps	do	do	do	
O. Lafleur	do	do	Ferry Scow	
J. Lafleur	do	do	do	
St. Ann's Lock.				
J. Foreman	English Canadian	Protestant	Lock Master	400 00
J, Barrett	Irish	Roman Catholic	Collector	625 00
L. Lamarche	French Canadian	do	Lock Laborer	$1 00 per day.
P. Paquette	do	do	do	
A. Lauzon	do	do	do	
Carillon and Grenville Canals.				
W. B. Forbes	Scotch Canadian	Protestant	Superintendent	600 00
G. T. Forbes	do	do	Lockmaster and Collector	90 cts. per day.
H. Cumming	Scotch	do	do do	
J. Mason	English	Roman Catholic	Lock Master	255 50
Wm. Cox	Welsh	Protestant	do	255 50
T. Foreman	English Canadian	do	do	292 00
C. Hartley	English	do	do	70 cts. per day.
Geo. C. Hartley	English Canadian	do	do	255 00
M. Lafrance	French Canadian	Roman Catholic	Lock Laborer	80 cts. per day.
J. Ladouceur	do	do	do	
G. Foreman	English Canadian	Protestant	do	
W. Perrier	French Canadian	Roman Catholic	do	
Jos. Teck	do	do	do	
A. Perrier	do	do	do	
F. Sauvé	do	do	do	
N. Deforce	do	do	do	
F. Tassé	do	do	do	
E. Poulin	do	do	do	
A. St. Denis	do	do	do	
E. Hartley	English Canadian	Protestant	do	
J. Kayson	Irish	do	do	
L. Le Roy	French Canadian	do	do	
Robert Robinson	Irish	do	do	

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Chambly Canal.				$ cts.
C. Préfontaine	French Canadian	Roman Catholic	Superintendent	1,000 00
J. Brennan	Irish	do	Lock Master	300 00
S. Bell	English	Protestant	do	300 00
S. Robinson	Irish	Roman Catholic	do	300 00
E. Laboissière	French Canadian	do	do	300 00
A. Hender	German	do	do	300 00
P. Leblanc	French Canadian	do	do	300 00
S. Malhiot	do	do	do	300 00
F. X. Berger	do	do	do	300 00
F. Chalon	do	do	do	300 00
N. Berger	do	do	do	300 00
O. Edson	American	Protestant	Bridge Keeper	280 00
T. Fryer	German Canadian	Roman Catholic	do	280 00
M. Sauvage	French Canadian	do	do	280 00
L. Papineau	do	do	do	280 00
J. Collette	do	do	do	280 00
E. Languedoc	do	do	do	280 00
C. Dubuc	do	do	do	280 00
J. Langlois	do	do	Ferry Keeper	145 00
St. Ours Lock and Dam.				
L. Larue	French Canadian	Roman Catholic	Superintendent	$2 00 per day.
J. Leboeuf	do	do	Collector	400 00
F. Duval	do	do	Lock Laborer	90 cts. per day.
C. Lemay	do	do	do	
Cornwall Canal.				
D. A. McDonell	Canadian	Catholic	Superintendent	1,000 00
W. Tackebury	do	do	Lock Master	400 00
J. Tanner	English	Protestant	do	280 00
M. Gleeson	Irish	Catholic	do	280 00
D. McDonald	Canadian	do	do	280 00
E. Cass	Irish	do	do	365 00
J. Denneney	Canadian	do	Bridge Keeper	240 00
M. Orr	Irish	Protestant	Lock Laborer	
J. Robinson	do	do	do	
J. Bridges	Canadian	do	do	
P. Kirwin	Irish	Catholic	do	$1 00 per day.
J. Tobin	do	do	do	
J. Bowie	do	Protestant	do	
J. Blandin	English	do	do	
J. Hunter	Irish	do	do	$1 25 per day.
G. Gallinger	Canadian	do	do	
A. McMillan	do	Catholic	do	
R. Martin	Irish	Protestant	do	
D. McCourt	do	Catholic	do	
J. Gillie	Canadian	Protestant	do	$1 00 per day.
T. Blackadder	do	do	do	
J. Gleeson	Irish	Catholic	do	
Wm. Bridges	Canadian	Protestant	do	
W. Kennedy	Irish	do	do	
D. Gillespie	Canadian	do	do	

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Cornwall Canal.—Continued.				
A. Runions	Canadian	Protestant	Lock Laborer	$1 00 per day.
E. Prescod	do	do	do	
G. Ross	do	do	do	
W. Phillips	do	do	do	
A. Annable	do	do	do	
T. Shields	Irish	Catholic	do	
O. O'Keefe	do	do	do	
A. McDonald	Canadian	do	do	
L. Gaffney	do	do	do	
John Denneny	Canadian	Catholic	Assistant Bridge Keeper	1 00 Per Day.
A. Gillespie	Irish	Protestant	Laborer	90
Pat. Denneny	Canadian	Catholic	do	90
J. Phillips	do	Protestant	Foreman of Scow	1 50
A. E. Cadwell	do	do	and Horse Towing Scow	1 25
Wm. Stoneburner	do	do	Light-House Keeper	75
D. McDonell	do	Catholic	Carpenter	2 00
R. Lockerbie	do	Protestant	do	1 50
P. Denneny	do	Catholic	Laborer	90
Williamsburgh Canals.				
Isaac N. Rose	Scotch	Protestant	Superintendent	1,000 00
C. C. Farran	Irish	do	Lock Master	280 00
C. De Castle	English	do	do	280 00
R. Toye	Irish	do	do	280 00
R. Watt	do	do	do	280 00
John Lane	do	Catholic	do	280 00
Wm. Reid	do	Protestant	do	280 00
Chas. Farran	do	do	Lock Laborer	$1 00 per day.
Chas. Summers	do	do	do	
R. Armstrong	do	do	do	
T. Cutler	French	Catholic	do	
A. Conlin	Irish	do	do	
J. Cheney	French	do	do	
P. McDonell	Irish	do	do	
G. Keeler	German	Protestant	do	
F. Doherty	Irish	Catholic	do	
James Reid	Scotch	Protestant	do	
R. Bare	Irish	do	do	
J. Mellon	do	do	do	
Ottawa Slides and River Works.				
H. Merrill	New Hampshire, U. S	Episcopalian	Superintendent	1,640 00
D. Scott	Scotch	Presbyterian	Accountant and Clerk	900 00
Wm. Kane	Irish	Roman Catholic	Messenger	313 00
B. Sweezey	New Brunswick	do	Deputy Slide Master	
M. Holt, sen	New Hampshire, U. S	Episcopalian	do	300 00
J. Rowan	Irish	W. Methodist	do	300 00
John Landon	Canadian, of American dissent	do	do	$1 00 per day.
A. Proudfoot	Scotch	Presbyterian	do	
D. Carmichael	do	do	do	300 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Ottawa Slides and River Works.—Continued.				
W. Thomson	Irish	Presbyterian	Deputy Slide Master	$1 00 per day.
J. McLaren	Scotch	do	do	300 00
E. McCrea	Irish	Roman Catholic	Boom Keeper	$1 25 per day.
D. McFarlane	Scotch Canadian	Presbyterian	Deputy Slide Master	300 00
J. McDonald	Irish	Tenets of Plymouth Brethren	do	534 96
R. McPhaden	Scotch	Presbyterian	do	$1 25 per day.
Chas. Wright, deceased				
J. Barry	Irish	Roman Catholic	Deputy Slide Master	300 00
Saguenay Slides.				
D. Boulanger	French Canadian	Roman Catholic	Superintendent	400 00
J. Chalifour	do	do	Assistant Slide Master	244 00
St. Maurice Works.				
H. R. Symmes	United States	Presbyterian	Superintendent	1,400 00
J. B. Normand	French Canadian	Roman Catholic	Boom Master	$2 00 per day.
F. Rousseau	do	do	Slide Master	
A. Rousseau	do	do	Assistant Slide Master	$36 00 per month.
A. Latreille	do	do	Boom Keeper	$1 00 per day.
J. Blondin	do	do	do	
F. Lacroix	do	do		
St. Peter's Canal, N. S.				
W. M. Kavanagh	Nova Scotian	Roman Catholic	Lock Master	280 00
Welland Canal.				
F. D. Woodruff	Canadian	Protestant	Resident Engineer	3,000 00
Fred Holmes	English	do	Assistant Engineer and Clerk	$2 00 per day.
Thos. Adams	Canadian	do	Paymaster and Clerk	1,440 00
J. P. Boomer	Irish	do	Harbor Master	1,125 00
N. Higgins	English	do	Harbor Master & Carpenter	600 00
F. Ramsay	Irish	do	Regulating Water	800 00
C. Thrush	English	do	Assistant, Regul. Water	$1 00 per day.
W. Ahern	Irish	Roman Catholic	Overseer of Works	52 00 Per month.
R. Collier	American	Protestant	Head Carpenter	75 00
T. R. Secord	Canadian	do	Carpenter	75 00
H. Higgins	English	do	Foreman	30 00
Mrs. Cook	Irish	Roman Catholic	Messenger	12 00
J. Finellan	Canadian	Protestant	Lock Master	30 00
W. Chase	English	do	do	30 00
R. Morrison	Irish	do	do	30 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF PUBLIC WORKS.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
Welland Canal.—Continued.				
J. Woodall	English	Protestant	Lock Master	$34 00 per month in summer.
J. McGillvray	Scotch	do	do	$30 00 per month in winter.
T. Barrett	Irish	do	Lock Tender	$34
A. Hamilton	Scotch	do	do	34
John Howe	Irish	Roman Catholic	do	34
J. Nestor	do	do	do	30
W. Weaver	Canadian	Protestant	do	30
James Howe	Irish	Roman Catholic	do	30
W. Walker	Canadian	Protestant	Lock Master	30
A. Carl	Irish	Roman Catholic	Lock Tender	30
J. Malpass	do	Protestant	Lock Master	34
J. Turnbull	Scotch	do	Lock Tender	34
F. Meagher	Irish	Roman Catholic	Lock Master	30
W. Hare	do	Protestant	Lock Tender	30
M. Driscoll	do	Roman Catholic	do	30
H. Hagen	do	do	do	30
J. Bradley	Canadian	Protestant	Lock Master	30
R. Boyle	Irish	do	Lock Tender	30
H. Plumsted	Canadian	do	do	30
D. McCarthy	Irish	Roman Catholic	Lock Master	30
E. Boyle	do	Protestant	do	30
A. Bradley	Canadian	do	Lock Tender	30
W. Wilson	do	do	do	30
B. Clark	do	do	Lock Master	30
John Reilly	Irish	Roman Catholic	do	30
C. P. Bradly	Canadian	Protestant	Lock Tender	30
M. Nestor	Irish	Roman Catholic	do	30
J. Cogan	do	do	Lock Master	30
Thos. Flynn	Canadian	do	do	30
A. Winslow	Irish	Protestant	Lock Tender	30
Henry Hair	do	do	do	30
G. A. Darley	Canadian	do	Lock Master	30
M. Moran	Irish	Roman Catholic	do	34
Jas. Delaney	Canadian	do	Lock Tender	34
W. Cochran	Scotch	Protestant	Lock Master	30
R. Gibson	Irish	do	Lock Tender	30
W. Cavers	Scotch	do	Lock Master	30
F. Weaver	Canadian	do	Lock Tender	30
J. Strang	Irish	do	Lock Master	30
J. Upper	Canadian	do	Lock Tender	30
J. McCabe	Irish	do	Lock Master	30
J. Madill	do	do	Lock Tender	30
R. Bradley	Canadian	do	do	30
W. Williams	Irish	do	Lock Master	30
A. Taggart	do	do	do	30
J. McAuley	do	Roman Catholic	Lock Tender	30
J. Phillips	do	Protestant	Lock Master	30
W. Burley	do	do	Lock Tender	30
T. Turner	do	do	Lock Master	30
S. Kane	do	do	Lock Tender	30
W. Fegan	do	do	Lock Master	30
A. Moran	do	Roman Catholic	Lock Tender	30
P. Friel	do	do	do	30
R. McMahon	do	Protestant	Lock Master	30
R. Swayze	Canadian	do	Lock Tender	30

Per month.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF PUBLIC WORKS.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
Welland Canal.—Continued.				
John Bruce	Scotch	Protestant	Lock Master	$30 Per month.
Wm. Upper	Canadian	do	Bridge Tender	26
Wm. Higgins	do	do	Lock Tender	30
A. Higgins	do	do	do	30
D. O'Lary	Irish	Roman Catholic	do	30
J. Radcliffe	Canadian	Protestant	do	30
Jas. McCoppen	Irish	do	do	26
John Watson	Scotch	do	do	26
J. Sweeney	Irish	Roman Catholic	do	34
Pat. Fahey	do	do	do	34
John Hinchey	do	Protestant	do	34
Ed. Hanley	do	Roman Catholic	Ferryman	34
Thos. Connor	do	do	Lock Master	30
Patrick Cummins	do	do	Lock Tender	26
George Howe	do	do	Bridge Tender	26
Chas. Kearnos	do	do	do	26
John McCaner	do	Protestant	do	26
D. Daley	do	Roman Catholic	do	26
John McNamara	do	do	do	26
S. Booth	do	Protestant	do	26
J. O'Neill	do	Roman Catholic	do	26
T. Price	do	do	do	26
J. Gearon	do	do	do	26
J. McDonnell	do	do	do	26
J. Waters	English	Protestant	Lock Tender	30
Wm. O'Leary	Irish	Roman Catholic	Bridge Tender	26
Jas. Walsh	do	do	do	26
Geo. Thompson	English	Protestant	do	26
H. N. Higgins	Canadian	do	do	26
B. Brennan	Irish	Roman Catholic	do	26
H. Quinlen	do	do	do	26
Jas. Edmonds	do	do	do	26
Jas. Foster	Canadian	Protestant	do	26
David Tufts	do	do	do	26
Chas. Hannah	do	do	do	30
George Hannah	do	do	do	30
Joseph Dickinson	do	do	do	26
Jeremiah Daley	Irish	Roman Catholic	do	26
George Harris	English	Protestant	do	26
M. Madden	Irish	Roman Catholic	Carpenter	$1 per day
River Trent & Newcastle District Works.				
G. W. Ranney	Canadian	English Church	Superintendent	$60 per month.
Thos. Laidley	Scotch	Presbyterian	Slide Master	156 00
Wm. Wood	do	do	do	150 00
Chas. Ranney	Canadian	English Church	Lock Master	200 00
Tim. Coughlan	Irish	Roman Catholic	do	120 00
Rideau Canal.				
J. D. Slater	English	Church of England	Superintendent	1,600 00
M. Carmen	Canadian	do	Book Keeper	1,000 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.	
				$ cts.	

DEPARTMENT OF PUBLIC WORKS.—*Continued.*

Rideau Canal.—Continued.					
Paul Cooper	Irish	Methodist	Messenger	$1 00	Per day.
Wm. Addison	do	Presbyterian	Lock Master	0 90	
Henry Pilson	Canadian	Methodist	do	0 70	
Michael Gleeson	Irish	Roman Catholic	do	0 70	
R. E. Hardy	Canadian	Protestant	do	0 70	
Wm. Geo. Addison	English	Church of England	do	0 80	
Geo. Shepherd	do	Protestant	do	0 70	
John Newman	do	do	do	0 70	
Thos. Newman	do	do	do	0 70	
M. H. Johnston	Canadian	do	do	0 80	
Wm. W. Mills	do	do	do	0 70	
D. Buck	Irish	do	do	0 70	
Josias Richey	do	do	do	0 80	
John Jones	do	do	do	0 70	
Abraham Pearson	do	do	do	0 70	
Michael Mooney	do	Roman Catholic	do	0 70	
Alf. Forster	English	Protestant	do	0 80	
Jas. W. Simmons	do	do	do	0 70	
John Johnston	Irish	do	do	0 70	
Peter Sweeney	do	Roman Catholic	do	0 80	
Pat. Deane	do	do	do	0 80	
John McGillivray	Scotch	Protestant	do	0 70	
Jos. Deane	Irish	Roman Catholic	do	$328.50 per annum.	
Geo. Newsome	do	Protestant	do	$ 70	Per day.
Francis Abbott	do	Church of England	Foreman	2 00	
Robert Shore	do	do	Lock Laborer	0 80	
Wm. Miller	do	do	do	0 80	
Wm. McAvoy	do	Roman Catholic	do	0 80	
Peter Curran	do	do	do	0 80	
M. Wallace	do	do	do	0 80	
Pat. Moran	do	do	do	0 80	
Jas. Kealey	do	do	do	0 60	
Jos. Johnston	do	Protestant	Bridge Tender	0 60	
Chas. T. Wright	Canadian	do	Lock Laborer	0 60	
Jas, Driscoll	Irish	Roman Catholic	do	0 60	
Pat. H. McGowan	do	Protestant	Bridge Keeper	0 50	
S. Santino	do		Lock Laborer	0 60	
Wm. Newman	Canadian	Protestant	do	0 60	
Pat. Rail	Irish	Roman Catholic	do	0 60	
John J. Newman	Canadian	Protestant	do	0 60	
Chas. O'Hara	do	Roman Catholic	do	0 80	
Pat. O'Hara	do	do	do	0 80	
Wm. Newsome	do	Protestant	do	0 60	
Wm. Lee	do	do	do	0 60	
John Lane	Irish	do	do	0 60	
Albert Mills	Canadian	do	do	0 60	
Benjamin Ager	Irish	do	do	0 60	
Pat. McGarr	do	Roman Catholic	do	0 60	
Jas. Burrows	do	Protestant	do	0 60	
Wm. Lavender	do	do	do	0 60	
Jas. Mooney	do	Roman Catholic	do	0 60	
Robt. Bolton	Canadian	Protestant	do	0 60	
Thos. Johnston	Irish	Protestant	do	60c per day	
Benj. Johnston	Canadian	do	do	$138.00 p.a	
James Howarth	English	do	do	75 cents per day.	
Wm. Mason	Irish	do	do		
Henry Rankin	English	do	do		

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Rideau Canal.—Continued.				
Hugh Glover	Irish	Protestant	Lock Laborer	75 cents per day.
Geo. Perns	do	do	do	
John Denison	do	do	do	
Jas. Keyes	do	Roman Catholic	do	
Thos. McGillivray	Scotch Canadian	Protestant	do	
John Hogan			do	
Jas. Doyle	Irish	Roman Catholic	do	172 50
Robert Sargent	Canadian	do	do	172 50
Michael Connor	Irish	do	do	172 50
John Redmond	do	do	do	172 50
Patrick Connor	do	do	do	172 50
Philip Brady	do	do	do	172 20
Official Arbitrators.				
Hon. P. Vankoughnet	Canadian	Church of England	Official Arbitrator	1,000 00
Jas. Cowan	Scotch	Presbyterian	do	1,000 00
Wm. Compton	Nova Scotian	Roman Catholic	do	1,000 00
Isidore Hurteau	French Canadian	do	do	1,000 00
Rideau Hall.				
James Sorley	English	Protestant	Gardener	600 00
Government Railways in New Brunswick.				
Lewis Carvell	New Brunswicker	Episcopalian	General Manager	2,400 00
Alex. McNaughton	Irish	Presbyterian	Accountant	1,000 00
Henry A. Whitney	New Brunswicker	Universalist	Loco. and Car Superinten't	1,000 00
Gavin Rainnil	do	Presbyterian	Track Master	$2.60 per d
E. W. Chestnut	do	Methodist	Paymaster	600 00
John Porter	Irish	Episcopalian	Cashier	500 00
Wm. G. Robertson	New Brunswicker	Methodist	Tele. Operator and Clerk	600 00
Edward T. Trites	do	Baptist	do do	500 00
D. W. Colpitts	do	do	do do	300 00
Samuel Watson	do	Presbyterian	Store Keeper	$1.50 per d
James Coleman	do	Methodist	Station Master	1,000 00
Robert H. Armstrong	do	Episcopalian	Ticket Agent	600 00
James T. Smith	do	Methodist	Entry Clerk	$1 50 Per day.
Edward Sandall	do	do	Receiving Clerk	1 25
E. A. Leonard	English	Episcopalian	Telegraph Operator	1 25
Thos. McMackin	New Brunswicker	do	Wharfinger	1 25
Thos. Mack	English	Presbyterian	Baggage Master	1 15
John Bane	Irish	Roman Catholic	Laborer	1 00
Andrew Russell	do	Presbyterian	do	1 00
John McAlee	do	do	do	1 00
C. Eagles	New Brunswicker	Methodist	do	0 70
John Knowles	English	Episcopalian	do	1 00
Jacob Wilson	New Brunswicker	Methodist	do	1 00
John Henderson	do	do	Policeman	1 00
Alex. Brewster	do	Episcopalian	Switchman	$37 50 per month
Owan Sullivan	Irish	Roman Catholic	Watchman	30 per m.
L. L. Fairweather	New Brunswicker	Episcopalian	Station Agent and Operator	28 34 per month.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Government Railways in New Brunswick.—Continued.				
Allan McN. Travis	English	Methodist	Station Agent and Operator	$33 34 per month
Patrick Murphy	Irish	Roman Catholic	Switchman	90c per day
Richard Davidson	Scotch	Presbyterian	Station Agent and Operator	$33 34 per month
Jas. Ryan, jun	New Brunswicker	Methodist	do do	$33 34 per month
Caleb F. Olive	do	Episcopalian	do	$41 67 per month
Thos. Corbett, jun	do	Roman Catholic	Laborer	80c per day
Geo. Murray	do	Episcopalian	Switchman	$1 per day
Chas. Chestnut	Scotch	Presbyterian	Watchman	26 00 } Per month.
Samuel McCready	New Brunswicker	Baptist	Station Agent and Operator	28 34
Thos. E. Smith	do	Episcopalian	do do	28 34
W. W. Price	Irish	Baptist	do do	33 34
J. A. Wallace	New Brunswicker	do	do do	33 34
J. A. Pitfield	English	Episcopalian	do do	33 34
John Flooks	do	do	Switchman	$1 20 per d
J. W. J. Henderson	New Brunswicker	Methodist	Station Agent and Operator	$33 34 per month
Richard Moore	English	Episcopalian	Switchman	$1 20 per d
Alex. Davidson	Scotch	Presbyterian	Station Agent	$60 per m.
John McLauchlin	do	do	Clerk and Operator	$1 25 per d
Wm. Smith	New Brunswicker	Baptist	Watchman	26 00 } Per month.
D. McCallum	Irish	Roman Catholic	Switchman	30 00
A. E. Cannon	New Brunswicker	Episcopalian	Clerk	20 00
J. B. Forster	English	do	Station Agent and Operator	33 34
C. R. Palmer	New Brunswicker	Methodist	do do	33 34
J. H. Frink	English	Episcopalian	do do	33 34
Robert Irvine	Irish	Presbyterian	Switchman	30 00
J. H. Bartlett	New Brunswicker	Methodist	Conductor	60 00
J. M. Decker	do	do	do	60 00
John S. Tretis	do	Baptist	do	60 00
Andrew Rainnil	do	Presbyterian	do	2 00 } Per day.
Geo. H. Pick	New Brunswicker	Episcopalian	do	2 00
W. B. Knight	English	Methodist	do	2 00
N. Cannon	do	Baptist	Baggage Master	1 25
Robt. Rainnil	New Brunswicker	Presbyterian	do	1 25
Wm. Kelly	Irish	Roman Catholic	do	1 25
M. Letarte	French	do	do	1 25
Jas. Millican	New Brunswicker	Presbyterian	do	1 25
Geo. Cellard	do	Episcopalian	Brakesman	1 25
David Topley	do	do	do	1 25
John Sproul	do	Baptist	do	1 25
Robt. McDonald	Scotch	Episcopalian	do	1 25
B. McPhee	New Brunswicker	Presbyterian	do	1 25
Samuel Allingham	Irish	Baptist	do	1 25
D. McQuarry	Scotch	Presbyterian	do	1 25
R. M. Stevens	New Brunswicker	Episcopalian	Engine Driver	60 00 } Per month.
D. A. Sinclair	do	Presbyterian	do	60 00
J. H. Moore	do	Baptist	do	60 00
John Stewart	Scotch	Presbyterian	do	60 00
Thos. W. Prince	New Brunswicker	Baptist	do	60 00
G. L. Smith	Irish	Presbyterian	do	60 00
Robt. James	New Brunswicker	Methodist	do	40 00
Robt. Carr	do	do	Fireman	30 00
Paul Daley	do	Episcopalian	do	30 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF PUBLIC WORKS.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
Government Railways, New Brunswick.—Continued.				
Jas. McDermott	New Brunswicker.	Presbyterian	Fireman	$30 Per m.
Jos. Johnston	do	Methodist	do	30 Per m.
Neil McDougall	do	Presbyterian	do	30 Per m.
Hugh Tait	Scotch	do	do	30 Per m.
Geo. Thomas	New Brunswicker.	Methodist	do	$1 00 per day.
John Benson			Cleaner	
John Jenner	English	Presbyterian	do	27 00 Per month.
Jas. Bertram	New Brunswicker.	Episcopalian	do	27 00 Per month.
Paul Arsenan	do	Roman Catholic	do	27 00 Per month.
Alfred Dryden	do	Baptist	do	27 00 Per month.
Geo. Proudfoot	English	Episcopalian	do	27 00 Per month.
Alex. Stronach	do	Presbyterian	Shop Foreman	62 50 Per month.
Jas. Tayre	do	Episcopalian	Machinist	2 00 Per day.
J. B. Taylor	Scotch	Presbyterian	do	1 70 Per day.
John Fogerty	Irish	Roman Catholic	do	1 50 Per day.
H. R. Perrie	Scotch	Presbyterian	do	1 40 Per day.
N. L. Rand	New Brunswicker.	Methodist	do	2 00 Per day.
J. L. Haycock	do	Universalist	do	1 50 Per day.
Thos Chilton	English	Episcopalian	do	1 25 Per day.
Thos. Boardman	do	do	Copper Smith	1 80 Per day.
Ed. Boardman	do	do	Helper	75 Per day.
C. C. Davidson	P. E. Island	Baptist	Blacksmith	67 Per day.
Pat. Pulrang	New Brunswicker.	Roman Catholic	Helper	00 Per day.
D. McConnell	Scotch	Presbyterian	Blacksmith	1 50 Per day.
Chas. McCann			Helper	Per day.
H. A. Chapman	Nova Scotian	Methodist	Carpenter	1 25 Per day.
Thos. Gay	English	Baptist	do	1 25 Per day.
Israel King	Canadian	Roman Catholic	Fitter	1 15 Per day.
Paul White	New Brunswicker.	do	Laborer	1 00 Per day.
Alfred Rome	English	Episcopalian	Brakesman	1 00 Per day.
Victor Doucett	P. E. Island	Roman Catholic	Laborer	1 00 Per day.
T. W. Fillimore	New Brunswicker.	Episcopalian	do	90 Per day.
J. McPherson, jun	Scotch	Presbyterian	Boiler Maker	1 25 Per day.
Jas. Heilson	P. E. Island	Episcopalian	Woodman	1 00 Per day.
Alex. McLellan	New Brunswicker.	Baptist	Laborer	1 00 Per day.
Alex. Cummings	do	do	do	40 Per day.
Samuel Millican	do	Presbyterian	do	1 10 Per day.
Wm. Kennedy	Scotch	do	Watchman	$26 00 per month.
Jacob Hughes	P. E. Island	Methodist	Foreman, Car Repairs	$60 00 per month.
Robt. Johnston	New Brunswicker.	Presbyterian	Machinist	$1 25 Per day.
Jas. Dawson	do	Methodist	Carpenter	1 40 Per day.
Jas. Barton	Irish	Episcopalian	do	1 35 Per day.
M. H. Chapman	New Brunswicker.	Methodist	do	1 35 Per day.
Thos. T. Trites	do	Baptist	do	1 35 Per day.
Wm. Stewart	Scotch	Presbyterian	do	1 35 Per day.
Geo. McKee	New Brunswicker.	Methodist	do	1 25 Per day.
Alex. Adams	do	do	do	1 25 Per day.
David Jones	do	do	do	1 25 Per day.
Melvin Jones	do	Baptist	Bolt Cutter	1 15 Per day.
Jas. Wright	English	Episcopalian	Woodman	1 00 Per day.
Wm. Duncan	New Brunswicker.	Methodist	Car Packer	1 50 Per day.
Wm. Duncan, jun	do	do	do	60 Per day.
H. Crookshanks	do	Episcopalian	Laborer	$28 00 per month.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Government Railways in New Brunswick.—Continued.				
Jos. Blair	Irish	Presbyterian	Laborer	$1 00
Edward Thorpe	English	Episcopalian	do	1 00
Eliza Pearce	New Brunswicker.	do	Car Cleaner	0 50
Annie Pearce	do	do	do	0 50
Alfred Pendleburg	English	Presbyterian	Painter	2 00
Wm. Knight	New Brunswicker.	Methodist	do	1 30
Thos. Merry	Irish	Presbyterian	do	1 30
Enoch Thompson	New Brunswicker.	Methodist	do	1 30
Jos. Mercer	do	Baptist	do	1 30
John Donovan	do	Roman Catholic	do	0 67
Wm. Compton	do	Baptist	do	0 60
Geo. Curry	do	Presbyterian	Laborer	1 00
Felix McCannon	Irish	Roman Catholic	do	1 00
H. Cochran	do	Presbyterian	Blacksmith	1 00
Jas. Ralston	do	do	Helper	1 00
Alex. Fraser	Scotch	do	Blacksmith	1 35
M. Corr	Irish	do	Helper	1 00
Jer. Thompson	New Brunswicker.	Methodist	Carpenter	1 25
Henry Hughes	do	do	do	1 25
John Adams	English	Episcopalian	Watchman	$26 00 per month.
W. Crossman	New Brunswicker.	Baptist	Tinsmith	$1 50
D. Moriarty	Irish	Roman Catholic	Laborer	1 00
Jas. Bertram	New Brunswicker.	Episcopalian	do	1 00
James Rafter	Irish	Methodist	Foreman Track	1 40
Wm. Hughes	do	Roman Catholic	Laborer	1 00
Isaac Stockford	New Brunswicker.	Methodist	do	1 00
John Connell	Irish	Roman Catholic	do	1 00
Sam. Dudey	English	Episcopalian	do	1 00
Sam. Ranshaw	do	Presbyterian	do	1 00
A. McCafferty	Irish	Roman Catholic	Foreman Track	1 40
Michael Commy	do	do	Laborer	1 00
John Ryan	New Brunswicker.	do	do	1 00
Wm. Jackson	English	Episcopalian	Foreman Track	1 40
Michael Gallagher	Irish	Roman Catholic	Laborer	1 00
Daniel Calvin	do	Presbyterian	do	1 00
John McPherson	Scotch	do	Foreman Track	1 40
D. White	English	Episcopalian	Laborer	1 00
J. M. Belding	Scotch	Presbyterian	do	1 00
Geo. Seamans	English	Baptist	Foreman Track	1 40
Tim. Connolly	Irish	Roman Catholic	Laborer	1 00
Jas. Drummond	Scotch	Baptist	do	1 00
B. Freeze	New Brunswicker.	do	Foreman Track	1 40
Thos. White	Irish	Roman Catholic	Laborer	1 00
Pat. Sullivan	do	do	do	1 00
Thos. Sizer	English	Methodist	Foreman Track	1 40
Wm. Crassman	New Brunswicker.	Baptist	Laborer	1 00
C. Kierstead	do	do	do	1 00
H. Kilpatrick	Irish	Presbyterian	Foreman Track	1 40
John Curry	Scotch	Baptist	Laborer	1 00
Chas. Daney	English	Methodist	do	1 00
Jas. Walton	do	Episcopalian	Foreman Track	1 40
Thos. Blake	Irish	Roman Catholic	Laborer	1 00
Michael Griffin	do	do	do	1 00
Robert Cochran	New Brunswicker.	Presbyterian	Foreman Track	1 40
Alex. McCauley	Nova Scotian	do	Laborer	1 00
Calais Leshue	New Brunswicker.	Roman Catholic	do	1 00

Per day.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF PUBLIC WORKS.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
Government Railways, New Brunswick.—Continued.				
Wm. Ryan	New Brunswicker.	Baptist	Laborer	$1 00 Per day.
Wm. Stimpson	English.	Episcopalian	Foreman Track	1 40
Louther Seamans	New Brunswicker.	Baptist.	Laborer	1 00
H. Brown	do	Methodist	do	1 00
H. Seamans	English	Baptist	do	1 00
John Hemlett.	do	Episcopalian	Foreman Track	1 40
John Coffee, Sr	New Brunswicker.	Roman Catholic.	Laborer	1 00
Andrew Leshue	do	do	do	1 00
Jude C. Burke	French	do	do	1 00
Thos. Bastian	English	do	Foreman Track	1 40
Wm. Russell	do	Methodist	Laborer	1 00
John Conan	New Brunswicker.	do	do	1 00
John Armour	do	do	do	1 00
John French	English	Presbyterian	Foreman Track	1 40
Jas. Chapman	Scotch	do	Laborer	1 00
John Cuthbertson	Irish	do	do	1 00
Thos. Cuthbertson	do	do	do	1 00
Willard Hutchinson	New Brunswicker.	Episcopalian	Foreman Track	1 40
M. McPherson	Scotch	Presbyterian	Laborer	1 00
Hugh Lutes	English	Methodist	do	1 00
Edward Duncan	do	do	do	1 00
Joseph Henderson	New Brunswicker.	Episcopalian	Carpenter	1 50
Government Railways, Nova Scotia.				
George Taylor	Scotch	Church of England	Superintendent	1,600 00
‡Alex. McNab	Canadian	do	Engineer	1,200 00
Thos. Foot	English	do	Accountant	1,600 00
Walter U. Jones	Nova Scotian	Wesleyan	Ass't Acc't and Paymaster	700 00
A. W. Clark	do	Baptist	Cashier	700 00
†A. K. Stephen.			Store Keeper	700 00
E. S. Blanchard	Nova Scotian	Presbyterian	Wood Inspector	500 00
G. G. Bulley	Scotch	Church of England	1st Check Clerk	500 00
Alfred Brush	Nova Scotian	do	Clerk	400 00
D. A. Story	do	do	do	200 00
Wm. Rennels	English	do	Telegraph Operator	300 00
J. Lyons		Roman Catholic.	do	300 00
†Chas. T. Lockhart			Assistant Store Keeper	$1 per day
Owen Cameron	Nova Scotian	Presbyterian	Messenger	50c. do
A. S. Busby	New Brunswicker.	Wesleyan	Station Master	800 00
J. Foot	English	Church of England	Ticket Master	600 00
D. Pottinger	Nova Scotian	Presbyterian	Freight Clerk	500 00
J. Carten	Irish	Roman Catholic.	do	500 00
C. J. Carten	Nova Scotian	do	do	400 00
Geo. W. Connors		Church of England	do	360 00
H. McCallum	Nova Scotian	Quaker	Hay Shed Keeper	$1 25 Per day.
Edward Boak	Jerseyman	Wesleyan	Freight Deliverer	1 10
Tim. Bowes	Irish	Roman Catholic.	Freight Porter	1 25
M. Phelan	Nova Scotian	do	do	1 25
Joseph Shea	Irish	do	do	1 10
John Meally	do	do	do	1 00
Henry Dixon	Nova Scotian	Presbyterian	do	1 10

‡ Only half salary, balance paid at Ottawa. † Left the service.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF PUBLIC WORKS.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
Government Railways, Nova Scotia.—Continued.				
†Chas. Woods			Freight Porter	$1 00 Per day.
James Brutcher	Nova Scotian	Wesleyan	do	1 00
Pat. Cronan	Irish	Roman Catholic	Passenger Porter	1 00
§N. McKinnon			Pointsman	1 00
John Lane	English	Church of England	Car Shunter	1 25
†Wm. Shefrow			do	1 25
James Phelan	Irish	Roman Catholic	Night Watchman	255 00
John Gannon	do	do	Freight Office Messenger	80 cts. per day.
Geo. W. Boggs	Nova Scotian	Baptist	Station Master	300 00
Jas. Brittain	Irish	Presbyterian	do	300 00
Wm. D. McCallum	Nova Scotian	Wesleyan	do	300 00
†D. Sinclair			do	400 00
J. D. Gladwin	Nova Scotian	Church of England	Assistant Station Master	50 cts. per day.
F. H. Holesworth	do	do	Station Master	300 00
T. M. Boggs	do	Baptist	do	300 00
T. V. Cooke	do	Church of England	do	500 00
Jas. Miller	do	Baptist	Freight Porter	$1.25 per day.
H. McMullin	Irish	Wesleyan	Watchman	300 00
G. Room	Nova Scotian	Presbyterian	Sunday Watchman	$1 00 Perdy
J. D. Christie	do	do	Policeman, &c	1 15
Chas. Hall	do	do	Pointsman	1 00
Jotham B. M[illegible]dy	do	do	Station Master	300 00
Wm. Cameron	Scotch	do	Woodman	$1 per day 300 00
A. M. Davidson	Nova Scotian	do	Station Master	
John Fraser	do	do	do	300 00
D. Graret	Canadian	do	Woodman	$1 per day
Wm. Fraser	Nova Scotian	do	Station Master	400 00
Jas. McDonald	do	do	do	400 00
J. B. Marshall	do	Church of England	do	500 00
Angus Kennedy	Scotch	Roman Catholic	Flagman	$1 per day
Roderick McDonald	Nova Scotian	do	Station Master	700 00
Allan McDonald	Scotch	Presbyterian	Freight Porter	400 00
J. Murray	do	do	Night Watch	255 00
W. Sutherland	Nova Scotian	do	Freight Porter	$1 00 Per day.
†J. McLeod			Pointsman	1 00
D. McLeod	Nova Scotian	Presbyterian	Freight Porter	1 00
Angus Cameron	do	do	Woodman	1 00
John Nairn	do	do	Capt. Str. "May Flower"	480 00
W. Sweetin	Scotch	do	Engineer do	480 00
W. Christie	Nova Scotian	do	Helmsman do	360 00
Alex. Sutherland	do	do	Mate do	360 00
†J. McFarlane			Fireman do	360 00
W. Hislop	Nova Scotian	Presbyterian	Deckhand do	$1 per day
W. Jack	Scotch	do	Station Master	600 00

† Left the service. § Dead.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government,—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF PUBLIC WORKS.- *Continued.*				
Government Railways, Nova Scotia.—Continued.				
Alex Gordon	Scotch	Wesleyan	Freight Porter	$1 per day
R. M. Holesworth	Nova Scotian	Church of England	Station Master	400 00
H. McIntosh	Scotch	Presbyterian	Woodman	$1 per day
E. Creelman	Nova Scotian	do	Tankman	1 50 per day.
D. Hallisey	Irish	Roman Catholic	Station Master	250 00
Richd. McLearn	Nova Scotian	Baptiat	do	300 00
Dan. Mumford	do	Church of England	do	300 00
Walter Sweet	do	Presbyterian	do	300 00
J. A. Cameron	do	do	Telegraph Operator	360 00
K. Sutherland	Scotch	do	Station Master	500 00
Louis Maynard	Nova Scotian	Church of England	Assistant Station Master	360 00
John Walsh	do	Baptist	Night Watch	$1 00
Chas. Hall	English	Church of England	Pointsman	1 00
John Holden	Nova Scotian	do	do	1 00
Jos. Barrs	do	Baptist	Freight Porter	1 25
Jas. Connell	do	Roman Catholic	Depot Stores Porter	1 10
P. Prendergast	P. E. Islander	do	Woodman	1 00
Sam. Kays	Nova Scotian	Presbyterian	Station Master	100 00
Jane McLeod	do	do	do	60 00
Thos. Lindsay	do	do	Tankman	$1.50 per day.
†Robt. Smith			Woodman	$1 per day
John Murray	Scotch	Roman Catholic	Conductor	700 00
E. Loasby	English	Church of England	do	600 00
R. G. Duncan	Scotch	Presbyterian	do	600 00
John Ryan	Nova Scotian	do	do	600 00
Jas. Geldert	do	Church of England	do	600 00
D. Rutherford	Scotch	do	do	600 00
Edward Davidson	Nova Scotian	Baptist	do	600 00
Thos. Birmingham	Irish	Roman Catholic	do	600 00
Hugh Jackson	Scotch	Presbyterian	do	$1 50
John Leonard	Nova Scotian	Roman Catholic	do	1 50
†John Blair			Spare Conductor	1 50
R. V. Greenwood	English	Wesleyan	Baggage Master	1 25
Edward Fripp	do	Church of England	do	1 25
‖W. Donkin			do	1 25
†Peter Grant			do	1 20
Dan. Jacob	English	Church of England	Brakeman	1 15
†W. Fraser			do	1 20
Chas. Rhodes	Nova Scotian	Church of England	do	1 20
†Jas. Magill			do	1 00
†Jas. Christie			do	1 15
†M. Ross			do	1 00
M. Neville	Nova Scotian	Roman Catholic	do	1 10
M. Barss	do	Baptist	do	1 00
N. Ross	do	Church of England	do	1 15
M. Casey	do	Roman Catholic	do	1 15
Edward King	do	Church of England	do	1 00
Alex. Whalen	Irish	Roman Catholic	do	1 25
†Abraham. Shanahouse			do	1 00
†W. Burns			do	1 00

Per day.

†Left the service. ‖ Absent on leave.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF PUBLIC WORKS.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
Government Railways, Nova Scotia.—Continued.				
W. Johnston	Scotch	Presbyterian	Locomotive Superintendent	1,400 00
W. Bennett	Nova Scotian	Church of England	Time Keeper and Clerk	300 00
H. Appleton	English	do	Machine Shop Foreman	$2 20
Alex. Cameron	Nova Scotian	Presbyterian	Engine Driver	2 25
M. Tobin	do	Roman Catholic	do	2 25
J. Trider	do	Presbyterian	do	2 25
W. Hunt	do	Roman Catholic	do	2 25
W. Bowen	do	Church of England	do	2 25
Fred. Tierney	do	Roman Catholic	do	2 00
Jas. Clark	English	Church of England	do	1 50
Edward Tobin	Nova Scotian	Roman Catholic	do	1 75
W. McKay Stephens	do	Wesleyan	do	2 25
Benj. Goodman	English	Church of England	do	2 00
J. McDowall	Nova Scotian	Presbyterian	do	2 25
J. Johnston	do	do	do	1 50
Samuel Cameron	do	do	do	2 25
John McDonald	do	Roman Catholic	Fireman	1 10
Edward Stockall	English	Church of England	do	1 20
Sam. Trider	Nova Scotian	Presbyterian	do	1 10
John Connell	do	Roman Catholic	do	0 95
Thos. O'Brien	do	do	do	1 00
Alex. Calder	do	Presbyterian	do	1 00
Jas. McLeod	do	do	do	1 00
John Isner	do	Church of England	do	1 00
Wm. Wall	do	do	Driver, &c	1 50
Henry McAuley	do	do	Fireman	1 20
A. Isner	do	do	do	1 00
Sam. McLeod	do	Presbyterian	do	1 10
M. Fuller	do	Baptist	do	1 00
Robt. McDonald	do	Presbyterian	do	1 00
Mich. Phelan	Irish	Roman Catholic	Cleaner	1 20
Jas. Connolly	do	do	do	1 00
John Cox	do	do	do	1 00
John Stockall	English	Church of England	do	1 00
Fred White	Nova Scotian	Presbyterian	do	1 00
John Ward	English	Church of England	do	1 00
Jas. Cameron	Nova Scotian	Presbyterian	Fireman	1 00
†J. Anderson			Cleaner	1 00
Geo. Cleland	Scotch	Presbyterian	Stationary Engine Keeper	1 50
Wm. Appleton, sen	English	Church of England	Machinist	2 00
Richd. Paver	do	do	do	1 80
Wm. Murphy	Irish	Roman Catholic	do	1 70
Geo. Dickens	Nova Scotian	Presbyterian	Fireman	1 00
M. McNally	Irish	Roman Catholic	Machinist	1 60
J. W. Porteous	Nova Scotian	Wesleyan	do	1 60
Wm. Hayden	do	Roman Catholic	do	1 60
E. S. Allen	English	Wesleyan	do	1 70
Wm. J. Conrad	Nova Scotian	Church of England	do	1 50
John Appleton	English	do	do	1 50
Wm. Appleton, jun	do	do	do	1 50
Carlos Gululin	Cuban	Roman Catholic	do	1 40
†John Mc. Kean			do	1 60

Per day.

† Left the service.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Government Railways, Nova Scotia.—Continued.				
†Neil Alexander	.....	.....	Machinist	$1 50
Richd. Wallace	Nova Scotian	Roman Catholic	do	1 25
P. McInnis	do	Church of England	do	1 40
Andrew Muirhead	Scotch	Presbyterian	do	1 80
†Jas. Kelly	.....	.....	do	1 50
Sam. Swindells	English	Church of England	do	2 00
Arthur Kelly	New Brunswicker	do	do	1 40
Edwin Clark	Nova Scotian	do	Apprentice	1 00
H. McInnis	do	do	do	0 75
†D. Mooney	.....	.....	do	0 95
M. Punch	Nova Scotian	Roman Catholic	do	0 80
Dan. Donoghue	.....	do	do	0 60
John Revel	Nova Scotian	do	do	0 50
Chas. Taylor	do	Church of England	do	0 50
D. Murray	Scotch	Roman Catholic	do	0 40
†H. Brookfield	.....	.....	do	0 40
G. M. Appleton	English	Church of England	do	0 40
M. Mulcahy	Nova Scotian	Roman Catholic	do	0 40
Chas. Murray	do	do	do	0 25
John Dugwell	do	Baptist	Copper Smith	1 75
Wm. Thomas	Welsh	Church of England	Pattern Maker	1 75
Jas. Wilson	Scotch	Presbyterian	Carpenter	1 50
Wm. Dymond	Nova Scotian	Wesleyan	Foreman Blacksmith	2 00
Wm. McGowan	do	Roman Catholic	Blacksmith Striker	1 00
Wm. B. Malcom	Nova Scotian	Presbyterian	Blacksmith	1 60
Jas. Martin	do	Church of England	do Striker	1 00
‡J. Hurshman	.....	.....	do	1 50
Jer. Keefe	Irish	Roman Catholic	do Striker	1 00
John Simmons	Nova Scotian	Wesleyan	do	1 15
Jas. McCormack	do	Roman Catholic	do Striker	1 00
John Guess	do	do	do	1 00
Wm. Thorpe	English	Church of England	do Striker	1 00
†Jas. Murray	.....	.....	do	1 50
†Chas. Fielding	.....	.....	do Striker	1 00
John Vicary	English	Wesleyan	do	1 40
M. Connell	Nova Scotian	Roman Catholic	do Striker	1 00
A. Anderson	do	Presbyterian	do	1 50
G. McKinlay	do	Wesleyan	do Striker	0 90
Thos. Revel	Irish	Roman Catholic	Bolt Turner	1 00
D. McPherson	Scotch	Baptist	Machine Shop Store Keeper	1 00
‡R. O'Mara	.....	.....	Laborer	1 10
N. Callahan	Newfoundlander	Roman Catholic	do	1 00
Benj. Parks	Nova Scotian	do	do	0 90
Edward Cann	do	Presbyterian	do	1 00
Dan Hinchin	do	Roman Catholic	do	0 95
Geo. Wright	do	Church of England	do	1 00
Wm. Sinclair	Scotch	Presbyterian	do	0 85
John Menzies	do	do	do	1 00
Robt. Brown	do	do	do	1 00
John Williams	Newfoundlander	Wesleyan	do	1 00
Thos. Rosley	Nova Scotian	Church of England	Night Watchman	1 00
Daniel Ward	do	do	Car Inspector	1 60
E. D. Shaffer	do	do	Car Shop Foreman	2 50
E. Sproull	do	Presbyterian	Car Inspector	1 60

Per day.

† Left the service. ‡ Dead.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Government Railways, Nova Scotia.—Continued.				
John Gunn	English	Church of England	Car Inspector	$1 60
John Kilcup	Nova Scotian	Wesleyan	do	1 50
John Rhind	do	Presbyterian	Carpenter	1 50
Robert Murray	Scotch	do	do	1 50
D. White	do	Church of England	do	1 50
W. Simpson	Nova Scotian	Presbyterian	do	1 40
P. Phelan	do	Roman Catholic	do	0 75
W. Lambert	do	Wesleyan	do	1 50
A. Clements	do	Baptist	do	1 50
Jas. Armstrong	New Brunswicker	Church of England	do	1 30
Wm. Brander	Nova Scotian	Presbyterian	do	1 50
M. Keefe	United States	Roman Catholic	do	1 50
J. Grant	Nova Scotian	Presbyterian	do	1 40
P. McGuire	do	Roman Catholic	do	1 30
†Geo. Deuce			do	1 40
Mark Lambert	Nova Scotian	Wesleyan	do	1 50
R. Pritchard	Welsh	do	do	1 50
C. Chambers	Nova Scotian	do	do	1 40
Wm. Gameron	New Brunswicker	do	do	1 40
†G. Thorn			do	1 40
J. Campbell	Nova Scotian	Presbyterian	do	1 50
Thos. Hibbetts	do	Roman Catholic	do	1 25
Wm. Davidson	do	Baptist	Apprentice	0 50
John Hopkins	do	Church of England	Tinsmith	2 00
Geo. Shaffer	do	do	Car Repairer	1 10
Owen Jones	English	do	Car Shop Store Keeper	1 20
Wm. Gray	do	Wesleyan	Labourer	1 00
John Martin	Irish	Church of England	do	1 00
Geo. Martin	Nova Scotian	do	do	1 00
Jas. Smith	do	Wesleyan	Blacksmith	1 60
H. Boutlier	do	Church of England	do Striker	1 20
S. Simmons	English	Wesleyan	do	1 40
Wm. Gibson	Nova Scotian	Presbyterian	do Striker	0 90
Jas. Ham	do	Church of England	Car Repairer	1 30
Thos. Prendergast	P. E. Islander	Roman Catholic	Car Oiler	1 00
John Conrick	Irish	do	Car Cleaner	1 00
Jos. Campbell	Nova Scotian	Roman Catholic	do	0 80
†Wm. J. Allison			Painter	2 25
D. Molloy	English	Wesleyan	do	1 50
Chs. Simmons	Nova Scotian	do	do	0 60
†John O'Brien			do	1 50
Geo. Simmons	Nova Scotian	Wesleyan	do	1 20
Jos. Janowyc	Hungarian	Church of England	Foreman Painter	2 00
†Henry Baker			Painter	1 50
Mark Hutson	English	Church of England	do	2 00
John Barrett	Nova Scotian	do	do	1 70
John Fox	do	Wesleyan	Carpenter	1 40
H. Clark	English	Church of England	Cleaner	1 00
†Wm. Atkinson			do	1 00
Wm. Marshall	Scotch	Presbyterian	Road Inspector	1,000 00
A. Feetham	English	Church of England	Road Master	2 00
Wm. Yould	do	Wesleyan	do	2 00
J. T. Clarke	do	Church of England	Section Foreman	1 50
Jas. Heffler	Nova Scotian	do	Laborer	1 00

Per day.

† Left the service.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF PUBLIC WORKS.—*Continued.*				
Government Railways, Nova Scotia.—Continued.				
Pat. McTierney	Irish	Roman Catholic	Laborer	$1 00
G. Dalton	do	do	do	1 00
Mrs. Emery Brwon	Nova Scotian	Baptist	Gate Keeper	0 20
Jas. Robinson	English	Church of England	Section Foreman	1 40
Wm. Purcell	Nova Scotian	Roman Catholic	Laborer	0 90
John Lynch	do	do	do	0 90
John Smith	English	Church of England	Section Foreman	1 40
Alex. Gray	Nova Scotian	do	Laborer	1 00
John Boutlier	do	do	do	1 00
Jas. Ennis	do	Roman Catholic	Section Foreman	1 40
Thos. Neville	Irish	do	Laborer	1 00
Alex. McLeod	Nova Scotian	Presbyterian	do	1 00
†Walter Neville	.....	.....	do	0 90
†Wm. Hillier	.....	.....	do	1 00
†Geo. Hillier	.....	.....	do	1 00
†Robt. Kings	.....	.....	Laborer	1 00
†Jas. Locke	.....	.....	do	1 00
Robt. Geddes	Nova Scotian	Presbyterian	Section Foreman	1 40
†Thos. Geddes	.....	.....	Laborer	0 90
Edward Barrett	Nova Scotian	Church of England	do	0 90
Pat. Hushin	Irish	Roman Catholic	do	0 90
Edward Largie	Canadian	do	Section Foreman	1 25
Martin Tobin	Irish	do	Laborer	0 90
Tim. Hopkins	do	do	do	0 90
†Mich. Ryan	.....	.....	do	0 90
O. Kilday	Nova Scotian	Roman Catholic	Section Foreman	1 25
Thos. White	do	do	Laborer	0 90
Geo. McIntosh	do	Presbyterian	do	0 90
Geo. Mason	do	Roman Catholic	Section Foreman	1 40
John O'Brien	do	do	Laborer	0 90
Chas. Hall	do	do	do	0 90
Thos. Carson	do	do	Section Foreman	1 40
John McCormack	do	do	Laborer	0 90
Robt. Green	do	Church of England	do	0 90
Pat. McCarthy	United States	Roman Catholic	Tankman	0 90
Geo. Ross	Nova Scotian	Church of England	Section Foreman	1 25
Wm. Ross	do	Presbyterian	Laborer	0 90
Alex. Ross	do	do	do	0 90
Wm. Kelly	do	Roman Catholic	Section Foreman	1 25
David Ryan	do	do	Laborer	0 90
†Wm. McDonald	.....	.....	do	0 90
Richard Densmore	Nova Scotian	Presbyterian	do	0 90
Dan. Lyons	Irish	Roman Catholic	Section Foreman	1 25
Thos. Cooper	do	do	Laborer	0 90
John McGuire	Nova Scotian	do	do	0 90
Pat. McLaughlin	Irish	do	Section Foreman	1 25
John Devine	do	do	Laborer	0 90
Jos. McLaughlin	Nova Scotian	do	do	0 90
Donald Scott	do	do	Section Foreman	1 25
Chas. Lindsay	do	Presbyterian	Laborer	0 90
J. Langille	do	do	do	0 90
Geo. Reise	German	Lutheran	Section Foreman	1 40
Thos. McFadden	Nova Scotian	Presbyterian	Laborer	0 90
Jas. McLellen	do	do	do	0 90

Per day.

† Left the service.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF PUBLIC WORKS.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
Government Railways, Nova Scotia.—Continued.				
H. Bokelman	German	Presbyterian	Section Foreman	$1 40
Wm. Waller	Nova Scotian	do	Laborer	0 90
John Wright	do	Church of England	do	0 90
Robt. Hamilton	do	do	Section Foreman	1 25
†David Fulton			Laborer	0 90
Jas. Rood	Nova Scotian	Church of England	do	0 90
Wm. Johnston	do	Presbyterian	do	0 90
Geo. Lauther	English	Church of England	Section Foreman	1 25
Hugh Fraser	Nova Scotian	Presbyterian	Laborer	0 90
Thos. Digby	English	Church of England	do	0 90
John Mason	Nova Scotian	Roman Catholic	Section Foreman	1 25
John Murphy	Irish	do	Laborer	0 90
†Wm. Mahony			do	0 90
Dan. Ferguson	Nova Scotian	Presbyterian	Section Foreman	1 25
†John Maynard			Laborer	0 90
†Jas. Warks			do	0 90
John Kelly	Irish	Roman Catholic	Section Foreman	1 25
†Pat. Hennesy			Laborer	0 90
Matthew Kelly	Nova Scotian	Roman Catholic	do	0 90
Allan McKinnon	Scotch	Presbyterian	Section Foreman	1 25
A. C. McKinnon	Nova Scotian	do	Laborer	0 90
David Pierce	do	do	do	0 90
†Wm. Alexander			Section Foreman	1 25
Dan. Fraser	Nova Scotian	Presbyterian	Laborer	0 90
Mark Connors	P. E. Islander	do	do	0 90
Andrew Ormiston	Nova Scotian	do	Section Foreman	1 40
D. Faulkner	do	do	Laborer	0 90
Andrew Skinner	Scotch	do	do	0 90
†John Fraser			Section Foreman	1 25
John McKenzie	Nova Scotian	Presbyterian	Laborer	0 90
John Cameron	do	do	do	0 90
Wm. Eastwood	do	do	Section Foreman	1 40
Simon Fraser	do	do	Laborer	0 90
H. McEaschern	Scotch	Roman Catholic	do	0 90
†Alex. Scott			do	0 90
John Brown	English	Presbyterian	Section Foreman	1 40
†Wm. Kentley			Laborer	0 90
John Atken	Nova Scotian	Presbyterian	do	0 90
†H. Carmichael			do	0 90
John W. McKay	Nova Scotian	Presbyterian	Section Foreman	1 25
Daniel McDonald	do	do	Laborer	0 90
Angus Cameron	do	do	do	0 90
H. Ferguson	do	do	do	0 90
John Lindsay	do	do	Section Foreman	1 25
Pat. Hulahan	Irish	Roman Catholic	Laborer	0 90
Mich. Jones	do	do	do	0 90
†Pat. Donoghue			do	0 90
Patrick Ash	Irish	Roman Catholic	Section Foreman	1 40
Rod. Ferguson	Nova Scotian	Presbyterian	Laborer	0 90
M. Donoghue	Irish	Roman Catholic	do	0 90
†Benj. Dean			do	0 90
†Wm. Barrett			do	0 90
†Thos. Walsh			do	0 90
John Walsh	Nova Scotian	Roman Catholic	Section Foreman	1 25

Per day.

† Left the service.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.	
				$ cts	
DEPARTMENT OF PUBLIC WORKS.—*Continued.*					
Government Railways, Nova Scotia.—Continued.					
Maurice Wallace	Irish	Roman Catholic	Laborer	$0 90	Per day.
†Wm. Pickett			do	0 90	
M. Gallighan	Irish	Roman Catholic	do	0 90	
B. Gorman	do	do	Section Foreman	1 25	
Wm. Horen	do	do	Laborer	1 00	
E. Brymer	New Brunswicker	Baptist	do	1 00	
†James Etter			Laborer	0 90	
H. Hopkins	Irish	Presbyterian	Section Foreman	1 40	
Pat. Smith	do	Roman Catholic	Laborer	0 90	
W. McEvoy	Nova Scotian	do	do	0 90	
†Robert Cox			do	0 90	
Robert King	English	Church of England	Section Foreman	1 25	
Thos. Frizzell	Nova Scotian	Baptist	Laborer	0 90	
H. Burton	English	Church of England	do	0 90	
Alex. Dunbar	Nova Scotian	Presbyterian	do	0 90	
S. Etchelle	English	Swedenborgian	Section Foreman	1 25	
Alex. Black	Irish	Presbyterian	Laborer	0 90	
W. Hinds	Nova Scotian	Church of England	do	0 90	
E. Elms	English	do	Section Foreman	1 40	
†W. Burns			Laborer	1 00	
Thos. Curry	Nova Scotian	Baptist	do	1 00	
†James Wilson			do	0 90	
†John Moshen			do	0 90	
H. Hopkins, jun.	Nova Scotian	Presbyterian	Tankman	0 25	
DEPARTMENT OF PUBLIC WORKS.—(*Additional, Appointed in* 1871.)					
Head Office.					
Thos. S. Scott	English	Presbyterian	Architect of P. W. Dept	2,400 00	
A. P. Bradley	Irish (from N. S.)	W. Methodist	Assistant Book-keeper	1,000 00	
Louis Fortier	French Canadian	Roman Catholic	Probationary Clerk	300 00	
W. Curran	Irish Canadian	do	do	300 00	
Théophile Fortier	French Canadian	do	do	300 00	
Lachine Canal.					
Arthur O'Neil	Irish	Roman Catholic	Lock Master	280 00	
Louis Simard	French Canadian	do	Foreman of repairs	$2 00 per day.	
Beauharnois Canal.					
J. A. Massé	French Canadian	Roman Catholic	Superintendent	1,000 00	
Antoine Poirier	do	do	Lock Master	280 00	
Charles Gendron	do	do	Laborer	$1 per day.	
Joseph Deschamps	do	do	do	1 do	

† Left the service.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts
DEPARTMENT OF PUBLIC WORKS.—(*Additional, Appointed in* 1871.)—*Continued.*				
Carillon & Grenville Canals.				
Henry Mason	English Canadian.	Roman Catholic ..	Lock Master	70 c. ₱ day
Gilbert Dumais	French do .	do ..	Laborer	$1 do
Chambly Canal.				
Joseph Manie	French Canadian.	Roman Catholic ..	Ferry Keeper	80 00
Cornwall Canal.				
Benjamin Johnson	Canadian	Protestant	Lock Laborer	$1 per day
Timothy Shields, jun	Irish	Roman Catholic ..	do	1 do
Williamsburgh Canal.				
A. Cutler	Canadian	Roman Catholic ..	Lock Laborer	$1 per day
Henry Caldwell	Irish	Protestant	Lock Master	280 00
Ottawa Works.				
Richard Chamberlain	Canadian	Church of England	Slide at Deschènes Rapids..	$1 per day
Welland Canal.				
Jonathan M. Woodall	Canadian	Anglican	Lock Tender	$30 00 per month.
Wm. Hare	Irish	do	Lock Master	280 00
Frederick Shrier	Swiss	Roman Catholic..	Lock Tender	30 00
Barnet Darby	Canadian	Methodist	Lock Master	30 00
James Ward	Irish	Roman Catholic..	Lock Tender	30 00
Robert Veitch	do	Methodist	do	30 00
John Corbett	do	Roman Catholic..	Lock Master	30 00
Joseph Upper	Canadian	Anglican	Lock Tender	25 00
Alexander Hannah	Irish	do	Lock at Aqueduct	26 00
John Wm. Scott	Canadian	do	Regulating Water	50 00
Arthur McCann	Irish	do	Lock Master	26 00
Jacob Reuter	German	Roman Catholic..	Lock Tender	26 00
Arthur Bradley	Irish	Anglican	do	26 00
Samuel Frazer	do	do	do	26 00
Michael Madden	Canadian	Roman Catholic..	do	26 00
John Gearon	Irish	do	Foreman	30 00
Andrew Hamilton	Canadian	Presbyterian	Carpenter	50 00
Rideau Canal.				
Wm. Addison, jun	English	Church of England	Lock Master	1 00
Archibald Boyd	Irish	Presbyterian	do	0 80
John Newman, jun	English	Church of England	do	0 70
Alfred Newsom	Irish	do	do	0 70
Wm. McCann	do	do	do	0 70
W. M. Richey	do	do	do	0 80
James Gordon Jones	do	do	do	0 70
W. J. Pearson	do	do	do	0 70

Per Month.

Per day.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF PUBLIC WORKS.—(*Additional, Appointed in* 1871.)—*Continued.*				
Rideau Canal.—Continued.				
Michael Mooney, jr.....	Irish	Roman Catholic...	Lock Master.....	$0 70 Per day.
John Johnson	do	Church of England	do	0 80
Alfred Foster.....	English	do	do	0 70
Archibald Boyd	Irish	do	Lock laborer.....	0 60
Henry Layng.....	do	do	Lock Master.....	0 80
James Driscoll..... ..	do	Roman Catholic...	Keeper Manotick Bridge ..	.....
European & North American Railway.				
E. T. Trites.....	New Brunswicker.	Baptist.....	Clerk and Paymaster.....	600 00
J. S. Smith.....	do ...	Methodist	Clerk and Operator.....	500 00
H. Mack.....	English	Presbyterian.....	Entry Clerk, St. John Station.....	$1 50 per day.
G. M. Jarvis	do	Baptist.....	Clerk and Tel. Operator, St. John Station	$25 00 per month.
T. A. Smith	New Brunswicker.	Episcopalian	Station Agent, Rothesay ..	240 00
†E. A. Leonard.....	English	do	Master, Apohaqui Station.	400 00
J. W. Wallace	New Brunswicker.	Baptist.....	Master, Penobsqui Station.	340 00
H. C. Brounell	English	Presbyterian.....	Master, Memramcook Station.....	300 00
T. McCready.....	New Brunswicker.	Baptist.....	Master, Painsec Junction..	400 00
Harry Herman.....	German	Episcopalian.....	Master, Sackville Station..	400 00
C. R. Palmer.....	New Brunswicker.	Methodist	Master, Dorchester Station	400 00
Nova Scotia Railway.				
D. Pottinger	Nova Scotian	Presbyterian.. ...	Cashier.....	700 0
Walter W. Jones	do	Westrian	Paymaster.....	800 0
Wm. Stevens.....	do	Presbyterian.....	Agent at Beelfut Station ..	300 0
DEPARTMENT OF MARINE AND FISHERIES.				
I. Staff in Office of Minister.				$ cts.
William Smith	Scotland.....	Presbyterian.....	Deputy of Minister	2,000 00
William F. Witcher	Canada.....	Episcopalian.....	Commissioner of Fisheries.	2,000 00
Joseph Tomlinson	England.....	do	General Superintendent of Lights	2,000 00
John Hardie	New Brunswick ..	Presbyterian.....	First Class Clerk, Marine Branch	1,500 00
John Tilton.....	do ..	Episcopalian.....	Accountant.....	1,500 00
Samuel Pierre Bauset.....	Canada.....	Roman Catholic...	Second Class Clerk, Fisheries' Branch	1,200 00
William L. Magee.....	New Brunswick ..	Methodist	Second Class Clerk, Accountant's Branch	1,150 00
François F. Gourdeau	Canada.....	Roman Catholic...	Second Class Clerk	1,000 00
Thomas Drinkwater	England.....	Episcopalian	Third do & *Précis* Writer	600 00
William H. Alexander.....	New Brunswick ..	Presbyterian.....	Third Class Clerk.....	500 00
John H. McIlbree.....	Ireland.....	Episcopalian.....	do do	400 00
George H. Harper.....	do	do	Probationary do	300 00

† Left the service.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF MARINE AND FISHERIES.—*Continued.*				
I. Staff in Office of Minister.—Continued.				
Thomas Wheeler	New Brunswick	Roman Catholic	Messenger	450 00
Thomas King	England	Episcopalian	do	300 00
Ellen Jessop	Ireland	do	Housekeeper	400 00
II. Lighthouse Keepers, &c., above Montreal.				
Isaac Hope	Ontario	Episcopalian	Superintendent of Lights, Kingston	1,200 00
John Norton	Ireland	Roman Catholic	Lachine Pier Light, No. 1.	401 00
Oliver Madore	Lachine	do	do do 2.	300 00
Oliver Veaudry (acting)	Lower Canada	do	do do 3.	300 00
Joseph Meloche	do	do	Beauharnois	225 00
William Shannon	Ontario	Presbyterian	Grosse Point	435 00
George Shannon	Lower Canada	do	do Assistant	175 00
Alexander McDonald	Ontario	Roman Catholic	McKie's Point	175 00
Edward S. Johnson	Lower Canada	Episcopalian	Cherry Island	447 00
George H. Johnson	do	Presbyterian	do	300 00
Thomas Hill	Ireland	do	Lancaster Pier	393 00
Richard Elliott	Ontario	do	Cole Shoal	250 00
Albert Root	do	Episcopalian	Grenadier Island	250 00
John Wallace	Ireland	do	Lindoe do	250 00
Cornelius Cook	Ontario	do	Gananoque Narrows	400 00
John Buck	do	do	Spectacle Shoal	560 00
Joseph Mervin	Lower Canada	do	Burnt Island	250 00
Robert Gillespie	Ireland	do	Wolfe Island	250 00
Nathaniel Orr	Ontario	Presbyterian	Snake Island	435 00
John Dunlop	Ireland	Roman Catholic	Nine Mile Point	435 00
Frederick Swetman	Ontario	Society of Friends	False Ducks	435 00
William A. Palen	do	Episcopalian	Point Peter	435 00
Wilson Bently	do	do	Scotch Bonnet	435 00
George B. Simpson	do	Methodist	Presqu'Isle Range	360 00
William J. Swetman	do	do	do	325 00
George Roddick	Scotland	Presbyterian	Gull Island	500 00
Robert Roddick	do	do	do Assistant	175 00
George Durnan	Ireland	Wesleyan	Gibraltar Point	435 00
George Thomson	Scotland	Presbyterian	Burlington Bay	300 00
Robert K. Chisholm	Ontario	do	Oakville	200 00
Jonathan Woodall	England	Episcopalian	Port Dalhousie	400 00
David H. Fortier	Ontario	do	Colborne	400 00
John Burgess	Scotland	Presbyterian	Mohawk Island	435 00
Fergus Scolfield	Ontario	Episcopalian	Maitland	350 00
Henry Morgan	Ireland	do	Dover	260 00
Alexander Sutherland	Scotland	Presbyterian	Burwell	320 00
Charles Ead	England	Methodist	Stanley	200 00
Henry Woodward	do	Episcopalian	Long Point	435 00
Peter McIntyre	Scotland	Presbyterian	Point Pelee Reef	435 00
James Edwards	do	do	do Assistant	325 00
James Cummins	Ireland	Roman Catholic	Point Pelee Island	435 00
Andrew Hackett	Ontario	Presbyterian	Bois Blanc	435 00
Thomas Cartier	do	Episcopalian	River Thames	435 00
Humphrey Fidler	Ireland	do	Goderich	325 00
John Young	Scotland	Presbyterian	Point Clark	435 00
Duncan McG. Lambert	Province Quebec	Episcopalian	Chantry Island	435 00
Roland A. Lambert	Ontario	do	do Assistant	175 00
David McBeath	Scotland	Presbyterian	Isle of Coves	435 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF MARINE AND FISHERIES.—*Continued.*				
II. Lighthouse Keepers, &c., above Montreal.—Continued.				
William McBeath	Canada	Presbyterian	Isle of Coves Assistant	300 00
Vesey C. Hill	Ireland	Episcopalian	Griffith's Island	435 00
George Collins	Ontario	do	Nottawasaga	435 00
Charles Collins	do	do	do Assistant	175 00
John Hoar	England	do	Christian Island	435 00
Arsene Glode	Province Quebec	Roman Catholic	Claire Light Ship, No. 1	300 00
Moise Leclerc	do	do	Point Claire	300 00
Alfred Laberge	do	do	Green Island	250 00
John Pringer	Ontario	do	Point Pleasant	300 00
Philemon Proulx	Province Quebec	do	Killarney	500 00
Andrew Hynes	England	do	St. Ignace	300 00
Donald McKenzie	New Brunswick	Presbyterian	Little Current	300 00
John Mason	Ontario	Methodist	Telegraph Island	200 00
Charles Patton	Ireland	Roman Catholic	Clapperton Island	350 00
William Shepherd	England	Episcopalian	Sulphur Island	325 00
John Egan	do	Roman Catholic	Lonely Island	350 00
James Eccles	Ireland	Episcopalian	Pigeon Island	300 00
Lewis Hodgins	.....	.....	Salmon Point	300 00
R. Campbell, (acting)	.....	.....	Point L'Orignal	.....
Oliver De Laire (acting)	.....	.....	Point McTavish	.....
Elie B. Prieur, (acting)	.....	.....	Coteau Landing	.....
J. C. Darke	England	.....	Muskoka or Fox Island	200 00
W. McGowan	Ontario	.....	Parry Sound	300 00
A. Mongeon	Province Quebec	Roman Catholic	Wade Shoal	100 00
III. Officers and Lighthouse Keepers under supervision of Trinity House, Montreal.				
E. D. David	Montreal	Hebrew	Registrar and Treasurer	1,325 00
P. E. Cotté	Bordeaux	Roman Catholic	Superintendent of Pilots	1,200 00
Daniel Rooney	Ireland	do	Clerk	600 00
Martin Brennan	do	do	Water Bailiff & Messenger	400 00
Joseph Mondor	Lower Canada	do	Agent at Sorel	300 00
Joseph Barnabé	do	do	Capt. of Steamer *Richelieu.*	800 00
Louis Marchand	Holland	do	Master Trinity House	625 00
Edouard Arcand	Deschambault	do	Keeper, Floating Light No. 2	$52
Olivier Auger	do	do	do do No. 1	52
Théophile Brodeur	Varennes	do	Keeper, Isle Ste. Thérèse	18
Pierre Beaudet	Lotbinière	do	Keeper, Lotbinière	15
Catherine Blaise	do	do	Keeper, L'islet Richelieu	20
François Boisvert	St. Croix	do	Keeper, Cape Charles	12
Jean Charrette	Isle d'Orleans	do	Keeper, Port St. Francis	16
Joseph Dussereau	Canadian	do	Keeper, Floating Light No. 3	52
Joseph Ethier	Repentigny	do	Keeper, Isle à la Bogue	16
Simon Françœur	St Jean D'Eschaill'n	do	Keeper, St. Pierre les Becquets	7
Léandre Fugères	Batiscan	do	Keeper, Batiscan	8
Joseph Gervais	Contrecœur	do	Keeper, Contrecœur	8
Dines Giguère	Lavaltrie	do	Keeper, Lavaltrie	30
Napoléon Hardy	Pointe aux Trembles	do	Keeper, Champlain	7
William Jeffs	Wales	do	Keeper, Montreal Harbour	15
Antoine Lamoureux	Boucherville	do	Keeper, Pointe aux Trembles	13
Joseph Lamoureux	.....	do	Keeper. Isle à la Pierre	30
François Lacroix	Contrecœur	do	Keeper, Contrecœur	8
Jean B. Lachapelle	Repentigny	do	Keeper, Repentigny	7

Per month.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.	
				$ cts.	
DEPARTMENT OF MARINE AND FISHERIES.—*Continued.*					
III. Officers and Lighthouse Keepers under supervision of Trinity House, Montreal.—Continued.					
Widow J. Langlois	Lotbinière	Roman Catholic	Keeper, Rivière du Chêne	8	Per month.
Jean B. C. de Larose	Verchères	do	Keeper, Isle aux Prunes	15	
Olivier Letendre	St. François	do	Keeper, Isle aux Raisins	30	
Paul Manuel	Bécancour	do	Keeper, Cap de la Magdeleine	10	
Joseph Marchand	Batiscan	do	Keeper, Batiscan	8	
Pascal Montplaisir	Cap de la Magdelaine	do	Keeper, Cap de la Magdeleine	10	
Médard Paquin	St. Barthélemi	do	Keeper, Pointe du Lac	10	
Edouard Paul	Province Quebec	do	Keeper, Isle de Grâce	12	
Richelieu Company	.....	.....	Keeper, Sorel	85 00	
Samuel Reeves	Province Quebec	Roman Catholic	Keeper, Isle de Grâce	8	Per month.
Charles Rivet	Repentigny	do	Keeper. Isle Ste. Thérèse	7	
Alexandre Trottier	Grondines	do	Keeper, Grondines	20	
Onésime Beaudet	Province Quebec	do	Keeper, Lotbinière	7	
O. C. de la Chevrotière	do	do	do	7	
IV. Trinity House, Quebec.					
Vital Tétu	Province Quebec	Roman Catholic	Master	1,000 00	
Alexandre Lemoine	do	do	Secretary-Treasurer	1,600 00	
Jesse D. Armstrong	do	Episcopalian	Harbour Master	1,600 00	
Francis Gourdeau	do	Roman Catholic	Superintendent of Pilots	1,200 00	
Alexander Lindsay	do	do	Assist. Secretary-Treasurer	1,200 00	
James Cassidy	do	do	Harbour Master, Amherst	50 00	
Pierre Chatigny	do	do	Messenger	120 00	
V. Lighthouse Keepers, &c., in River and Gulf of St. Lawrence.					
John U. Gregory	Province Quebec	Roman Catholic	Agent of Department	1,200 00	
Elzéar E. Buteau	do	do	Clerk	600 00	
John Smith	England	Methodist	Superintendent of Lights	1,200 00	
F. Rodrigue	Province Quebec	Roman Catholic	Portneuf Keeper	200 00	
James Thurber	do	do	Saint Croix Keeper	140 00	
Léon Lafleur	do	do	St. Antoine Keeper	100 00	
Joseph Chabot	do	do	Point St. Lawrence Keeper	300 00	
Edouard Thivierge	do	do	Bellechasse Keeper	320 00	
E. Simard	do	do	Mont du Lac Keeper	500 00	
Joseph Painchaud	do	do	Crane Island Keeper	320 00	
Damase Babin	do	do	Stone Pillars Keeper	450 00	
John Landry, (acting)	.....	.....	Upper Traverse Light Ship	.....	
J. Gourdeau	Province Quebec	Roman Catholic	Lower do do	.....	
Thomas Roy Desjardins	do	do	Grand Isle, Kamourska	320 00	
Jean C. Marquis	do	do	Long Pilgrims	340 00	
Jean Baptiste Picard	do	do	Brandy Pots	400 00	
Elzéar Fraser	do	do	Red Island Keeper	660 00	
J. Lavésque	do	do	Red Island Light Ship and Fog Whistle	.....	
Gilbert Lindsay	do	Presbyterian	Green Island	860 00	
J. T. Béchard	do	Roman Catholic	Bicquette Island	760 00	
D. Lawson	do	Presbyterian	Father Point	340 00	
Paul Pouliot	do	Roman Catholic	Pointe des Monts	760 00	

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF MARINE AND FISHERIES.—*Continued.*				
V. Lighthouse Keepers, &c., in River and Gulf of St. Lawrence.—Continued.				
A. Riverin	Province Quebec	Roman Catholic	Seven Islands	.....
D. Tétu	do	do	South Point or Bagot's Bluff, Anticosti Light House and Fog Whistle.	800 00
Louis Malouin	do	do	West Point, Anticosti, Light House & Provision Depôt	800 00
E. Pope	do	Episcopalian	South-West Point, Anticosti	800 00
Thomas Gagné	do	Roman Catholic	Heath Point, Anticosti	800 00
Robert Setter	do	Episcopalian	Ellis Bay Provision Depôt	200 00
Bernard Bradley	do	Roman Catholic	Shallop Creek do	240 00
Auguste Trudeau	do	do	Cape Rosier	800 00
Joseph Eden	do	do	GaspéBasinHarbourMaster	125 00
John Ascah	do	do	Sandy Beach Light Ship	.....
J. F. Gallie	do	do	Paspebiac Light	100 00
Pierre Godier	do	do	Amour Point, or Forteau L. H., Labrador	820 00
Martin Coltin	do	do	Belleisle	1,060 00
Henry Locke, (acting)	England	Episcopalian	Cape Norman, Newfoundland Shore	.....
Eugène Roy	Quebec	Roman Catholic	Point Rich, Newfoundland Shore	.....
Robert Rennie	Scotland	Presbyterian	Cape Ray, West side, Newfoundland Shore	600 00
William Carmier	Quebec	Roman Catholic	Amherst, Magdalen Island	300 00
J. Chapman, (acting)	.....	.....	Bird Rocks, do	.....
Joseph Roy	Quebec	Roman Catholic	Cape Chatte	300 00
Philip Savage	do	Episcopalian	Cape Magdalen	300 00
Paul Coté	Province Quebec	Roman Catholic	Egg Island	500 00
James Cassidy	do	do	Amherst Island Harbour Master	50 00
VI. Lighthouse Keepers, &c., New Brunswick.				
John H. Harding	New Brunswick	Baptist	Agent of Department	1,600 00
William H. Venning	do	do	Inspector of Fisheries	1,400 00
James Mitchell	do	Presbyterian	Inspector of Lights	1,200 00
James Clarke	Nova Scotia	Baptist	Grindstone Island Light Keeper	400 00
George Tingley, (acting)	.....	.....	Cape Enrage Light Keeper	400 00
William Love	Ireland	Episcopalian	Quaco Light Keeper	400 00
Alexander Reed	England	do	Partridge Island Light Keeper	500 00
Elijah Ross	Nova Scotia	Free Will Baptist	Beacon Light Light Keeper	400 00
George Thomas	New Brunswick	do	Point Lépreux Light Keeper	400 00
Jonathan Kent	Grand Manan	Episcopalian	Swallow-Tail Light Keeper	400 00
John R. Snell	England	W. Methodist	Head Harbor do	400 00
George A. Pendlebury	New Brunswick	Apostles	Saint Andrew's do	300 00
Walter B. MacLaughlin	Nova Scotia	Baptist	Gannet Rock do	840 00
John Conly	New Brunswick	Episcopalian	Machias Seal Isl'd. do	664 00
John Bent	Nova Scotia	Baptist	Cape Jourimain do	200 00
George McConnell	do	Episcopalian	Miscou do	500 00
William Hay	Scotland	Presbyterian	Escuminac do	400 00
Fabien Richard	New Brunswick	Roman Catholic	Richibucto do	160 00
George Rogers	Newfoundland	do	Fox Island do	200 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF MARINE AND FISHERIES.—*Continued.*				
VI. *Lighthouse Keepers, &c., New Brunswick*—Continued.				
George Davidson	New Brunswick	Presbyterian	Portage Island Light	Keeper 200 00
Henry Hendrickson	Norway	Episcopalian	Shediac Island	do 200 00
James Wilson	Scotland	Presbyterian	Partridge Island, Fog-Whistle Engineer	400 00
William Cameron	New Brunswick	do	Partridge Island, Fog-Whistle Assis't Engineer	240 00
Francis Russell	do	Protestant	Lower Newcastle	Keeper. 100 00
Thomas Kerr	Scotland	Presbyterian	Carraquet Island	do 200 00
William Gallant	P. E. Island	do	Point Lépreux, Fog Whistle Engineer	400 00
James Caughlin	New Brunswick	Roman Catholic	Oak Point Light	Keeper. 100 00
Thomas Lewis	Wales	Episcopalian	Preston Beach	do 100 00
John N. Williams	United States	Baptist	Green Head	do 80 00
John W. Caulfield	Ireland	do	Sand Point	do 80 00
Charles Theal	Carleton	Episcopalian	Oak Point	do 80 00
Edmund Buzza	England	do	No man's Friend	do 80 00
James King Hazen	New Brunswick	do	Oromocto Shoals	do 80 00
John D. Wilmot	England	do	Wilmot's Bluff	80 00
John Connors	Ireland	Roman Catholic	Bathurst	do 80 00
M. J. Cox			Cox's Point, Grand Lake, Light Keeper	80 00
William Cline	New Brunswick	Protestant	Southern Wolves' Light Keeper	500 00
Jarvis Clarke	do	do	Bliss Island Light	Keeper. 200 00
Louis Arsineau	do	Roman Catholic	Dalhousie	do 100 00
Samuel T. Gove	do	Episcopalian	Medical Superintendent, St. Andrew's Hospital	200 00
Mary A. Day	England	do	Matron	do 208 00
L. Botsford, M.D	do	do	Medical Superintendent, Kent Hospital	560 00
Milton Barnes	New Brunswick	New Testament	Keeper, Kent Hospital	144 00
C. A. Barnes	do	do	Male Nurse	do 144 00
Mrs. Milton Barnes	Nova Scotia	do	Matron	do 80 00
Margaret Economy	New Brunswick	do	Cook	do 48 00
S. L. Bishop	England	Episcopalian	Medical Superintendent, Bathurst Hospital	40 00
Janet Miller	Scotland	Presbyterian	Matron	do 208 00
G. L. Harding, M.D	New Brunswick	Baptist	Medical Superintendent, Pest House, Partridge Island	100 00
Rev. W. Armstrong	England	Episcopalian	Chaplain, Kent Hospital	100 00
Charles Ward	New Brunswick	do	Secretary	do 400 00
J. Thomson	Scotland	Presbyterian	Medical Superintendent, Miramichi Hospital	200 00
P. Lawlor	Ireland	Roman Catholic	Keeper	do 40 00
H. H. Wilson	do	Presbyterian	Medical Superintendent, Kingston Hospital	100 00
Hannah McNeil	Newfoundland	do	Matron	do 100 00
William Taylor	New Brunswick	Roman Catholic	Com'r. of Buoys & Beacons	10 per cent. Commission.
William Whitlock	do	Episcopalian	do	do
H. B. Smith	England	do	do	do
Robert Young	New Brunswick	Presbyterian	do	do
James Campbell	do	Episcopalian	do	do
Donald Stewart	Scotland	Presbyterian	do	do
Zechariah Chipman	Nova Scotia	Free Methodist	do	do
James Ritchie	Scotland	Presbyterian	do	do
Allan McLean	New Brunswick	Protestant	Shipping Master, Port St. John, N.B.	Fees of Office.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF MARINE AND FISHERIES.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts
VII. *Lighthouse Keepers, &c., Nova Scotia.*				
Henry W. Johnston	Halifax	Roman Catholic	Agent of Department	1,600 00
Lewis J. Burpe	Burmah	Episcopalian	Clerk	800 00
John H. Kendrick	Nova Scotia	Methodist	Superintendent of Lights	1,200 00
Henry G. Bennett	do	Baptist	Amet Island Light Keeper	500 00
Frederic W. Brag	England	Episcopalian	Annapolis do	460 00
James Tate	Nova Scotia	Methodist	Apple River do	380 00
Joseph Costé	do	Roman Catholic	Arichat do	232 00
James S. Smith	do	Methodist	Barrington do	380 00
Norman Campbell	P. E. Island	Presbyterian	Beaver Island do	420 00
Angus Ross	Nova Scotia	do	Bird Island do	400 00
John Crotty	Ireland	Roman Catholic	Black Rock do	360 00
Donald Morrison	Scotland	Presbyterian	Black Point do	350 00
Henry M. Ruggles	England	Episcopalian	Boars's Head do	400 00
Joseph Suthern	Brier Island	Baptist	Brier Island do	460 00
Nathan Smith	Douglas	Methodist	Burnt Coat Head do	250 00
James Hanlon	Ireland	Roman Catholic	Cape Canso do	472 00
Isaac Doane	Nova Scotia	Baptist	Cape Sable do	480 00
David Condon	do	Roman Catholic	Cape St. George do	480 00
Maturin Robicheau	do	do	Cape St. Mary's do	500 00
Alexander Munro	Scotland	Presbyterian	Carribou Island do	400 00
Edward Young	Nova Scotia	Baptist	Chester do	400 00
Benjamin Rynard	do	Methodist	Cross Island do	460 00
Benjamin Fulker	do	Episcopalian	Devil's Island do	380 00
William Condon	do	Roman Catholic	Egg Island do	500 00
Joseph B. White	do	do	Fish Island do	280 00
Benjamin Heney	do	Methodist	Flint Island do	400 00
Samuel T. N. Sellon	do	do	Port Point do	240 00
William Duann	do	Roman Catholic	Green Island do	500 00
Samuel Hayden, jun	do	do	Gull Rock do	400 00
Godfrey S. Peart	do	Episcopalian	Guysboro' do	220 00
Charles E. Rathburn	do	do	Horton Bluff do	250 00
S. C. Campbell	do	do	Ingonish do	300 00
Enos Wolfe	do	Presbyterian	Iron Bound do	360 00
Charles Firth	do	Methodist	Little Hope do	500 00
Thomas Eaton	England	do	Liverpool do	460 00
Lawrence Kavanagh	Nova Scotia	Roman Catholic	Louisburg do	460 00
John G. Peters	do	Baptist	Low Point do	460 00
John A. Ernst	do	Episcopalian	Lunenburg do	240 00
J. Burke, (Acting)			Main à Dieu do	300 00
William Earley	Ireland	Methodist	Margaretville do	230 00
Nathaniel C. McKeen	Nova Scotia	Presbyterian	Margaree do	400 00
David L. George	Wales	Roman Catholic	Meagher's Beach do	400 00
Henry Moser	Nova Scotia	Presbyterian	Moser's Island do	450 00
George McKay	do	do	North Canso do	460 00
William Armstrong	do	Baptist	Parrsboro' do	340 00
Edward Horn	do	Episcopalian	Peggy Point do	350 00
Henry B. Lowden	do	Presbyterian	Pictou do	460 00
Andrew Hogg	Scotland	do	Pictou Island do	460 00
J. McDonald	Nova Scotia	Roman Catholic	Point Tupper do	200 00
John Atwater	do	Episcopalian	Ponket Island do	350 00
Thomas Power	do	Roman Catholic	Port Hood do	280 00
Elson Perry	do	Baptist	Port Medway do	260 00
James M. Dunn	do	Protestant	Port Williams do	260 00
Maturin Amero	do	Roman Catholic	Pubnico do	240 00
R. F. Bent	do	Episcopalian	Pugwash do	200 00
William Gilkie	Scotland	Presbyterian	Sambro do	400 00
Joseph Mundell	Nova Scotia	do	Sand Point do	400 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF MARINE AND FISHERIES.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
VII. *Lighthouse Keepers, &c., Nova Scotia.*—Continued.				
John McLean	Scotland	Presbyterian	Scaterrie Light Keeper.	820 00
Thorndick C. Crowell	Nova Scotia	Baptist	Seal Island do	480 00
Charles Stalker	Scotland	Presbyterian	Shelburne do	480 00
Robert A. Spencer	Nova Scotia	do	Spencer's Point do	100 00
B. Amero	do	Roman Catholic	Sissiboo do	200 00
J. Morrison			St. Ann's do	100 00
Lauchlan McDougall	Scotland	Presbyterian	St. Paul's, S.W., do	420 00
			St Paul's, N.E., do	50 00
John D. Suthern	Brier Island	Baptist	West Port do	300 00
James P. Dillon	Nova Scotia	Roman Catholic	Whitehead do	400 00
Cornelius J. T. Fox	do	Methodist	Yarmouth do	480 00
do do (Acting)	do	do	Yarmouth Fog Alarm Engineer	400 00
J. Cormack (Acting)			Cranberry Island, Fog Alarm Engineer	450 00
H. Hayden			Seal Island Fog Alarm Engineer	500 00
Samuel Reardon (Acting till 10th November)	Nova Scotia	Episcopalian		
Philip Dodd	do	do	Supt. Humane Establishment, Sable Island	572 00
Josiah Kelly	No return, as the boatmen on Sable Island are continually changing		Boatman Humane Establishment, Sable Island	144 00
James Hawkins	do	do	do do	144 00
Duncan McDonald	do	do	do do	144 00
Stephen White	do	do	do do	144 00
John Sellers	do	do	do do	144 00
William Bowes	do	do	do do	144 00
John Black	do	do	do do	144 00
George Johnston	do	do	do do	144 00
William Goldsworthy	do	do	do do	144 00
J. R. Hubley	do	do	do do	144 00
H. E. Hubley	do	do	do do	144 00
William Messon	do	do	do do	144 00
N. McInnis	do	do	do do	144 00
John McNeil	do	do	do do	144 00
Edward Shiers	do	do	do do	144 00
D. J. McNeil	do	do	do do	144 00
			Supt. Humane Estab., St. Paul's Island	800 00
Michael Runole	do	do	Boatman Humane Estab. St. Paul's Island	200 00
Henry Copstick	do	do	do do	200 00
Thomas Curtice	do	do	do do	200 00
John Doufney	do	do	do do	200 00
VIII. *Montreal River Police.*				
John McLaughlin	Ireland	Roman Catholic	Chief Constable	2 50 per day.
George Hunter	do	Protestant	Sergeant	1 50
William Donohue	do	Roman Catholic	do	1 50
John Wilson	do	do	do	1 50
Camille Nourie	Canada	do	do	1 50
Thomas Banville	Ireland	do	Constable	1 00
John Bolster	do	do	do	1 00
Louis E. Charest	Canada	do	do	1 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF MARINE AND FISHERIES.—*Continued.*

NAMES	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
VIII. *Montreal River Police.*—Continued.				
John Davis	Ireland	Roman Catholic	Constable	1 00 Per day.
Daniel Falvey	do	do	do	1 00
Honoré Hottin	Canada	do	do	1 00
Daniel Keirman	Ireland	do	do	1 00
Thomas McCormack	do	do	do	1 00
Martin Meaney	do	do	do	1 00
John Murray	do	do	do	1 00
Culbert Olivier	Canada	do	do	1 00
Modiste Piché	do	do	do	1 00
Joseph Rousseau	do	do	do	1 00
Richard Sandiland	Scotland	Presbyterian	do	1 00
Mathieu St. Pierre	Canada	Roman Catholic	do	1 00
James White	Ireland	do	do	1 00
Pierre Royer	Canada	do	do	1 00
IX. *Quebec River Police.*				
Robert H. Russell	Irelan	Episcopalian	Chief Constable and Shipping Master	1,200 00
Albert Parker	Lower Canada	Protestant	Clerk to Shipping Master	800 00
John Bell		do	Engineer	600 00
James Cunningham	Ireland	Roman Catholic	Steersman	$1 80 Per day.
John Battle	do	do	Coxswain	1 40
Nicholas Fitzhenry	do	do	do	1 40
John Daud	do	do	Detective and Shipping Officer	1 60
Patrick Hickey	do	do	Constable	1 10
James Walsh	do	do	do	1 10
James Kelly	do	do	do	1 10
John Muller	do	do	do	1 10
John Keenan	do	do	do	1 10
Joseph Mathieu	Canada	do	do	1 10
Arthur Rogers	Ireland	do	do	1 10
Joseph Dugan	do	do	do	1 10
Francis Hallwell	do	do	do	1 10
Pierre Bédégare	Canada	do	do	1 10
Edouard Lacroix	do	do	do	1 10
Joseph Dionne	do	do	do	1 10
Patrick McCaffery	Ireland	do	do	1 10
Henry Wilson	do	do	do	1 10
Louis Pécard	Canada	do	do	1 10
Elzéar Bourgoult	do	do	do	1 10
John Stafford	Ireland	do	do	1 10
Louis Marceau	Canada	do	do	1 10
Jeremie Kerouac	do	do	do	1 10
X. *Officers of Dominion Steamers.*				
Anselm Marmen	Province Quebec	Roman Catholic	Captain, Steamer *Druid*	800 00
Stephen Carroll	do	do	Engineer do	800 00
Eugene Gourdeau	do	do	Capt., Str. *Napoleon III*	800 00
William Barbour	Scotland	Presbyterian	Engineer do	800 00
Joseph Leblanc	Province Quebec	Roman Catholic	First Mate do	$30 per m. for season.

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF MARINE AND FISHERIES.—*Continued.*				
X. *Officers of Dominion Steamers.*—Continued.				
Thomas Drysdale	Province Quebec	Presbyterian	Se'd. Engineer, *Napoleon III*	$50 per m. for season.
Peter A. Scott	England	Episcopalian	Captain, Steamer *Lady Head*	*Nil.
George Matson	Ireland	do	First Officer do	600 00
James Courtney	do	Roman Catholic	Second do do	480 00
Archibald Warner	Nova Scotia	do	Chief Engineer do	800 00
William Barry	do	do	Assistant do do	600 00
John Jodry	New Brunswick	Presbyterian	Carpenter do	480 00
XI. *Board of Steamboat Inspection.*				
Samuel Risley	United States	Episcopalian	Chairman	1,400 00
William M. Smith	New Brunswick	Baptist	Steamboat Inspector	1,000 00
Joseph Taylor	Ireland	Wesleyan	do	800 00
Thomas Fessenden	Lower Canada	do	do	800 00
Francis Befort	do	Roman Catholic	do	800 00
Joseph Samson	do	do	do	800 00
XII. *Board of Examiners of Masters and Mates.*				
Capt. P. A. Scott	England	Episcopalian	Chairman of Examiners	1,600 00
E. D. Ashe	do	do	Exaniner, Port of Quebec	4 00 Per day, when on duty
Anselm Marmen	Province Quebec	Roman Catholic	do do	4 00
Joseph Prichard	England	W. Methodist	do St. John.	4 00
David Cronk	New Brunswick		do do	4 00
George McKenzie	do		do Halifax.	4 00
John Taylor	Scotland		do do	4 00
XIII. *Officers of Observatories.*				
Edward D. Ashe	England	Episcopalian	Director of Quebec Obsert'y	1,402 68
Thomas Heatley	Ireland	Roman Catholic	Assistant do	491 40
John McGowan	do	do	Labourer do	39 50
George Hutchison	New Brunswick	Presbyterian	Director of St. John Obsert'y	500 00
DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of Ontario.*)				
Henry Hunter	Ireland.	Episcopalian	Fishery Warden	20 00
John Wallace	do	do	do	40 00
J. A. Cameron	Canada	do	Fishery Overseer	No Salary.
John Mooney	Ireland	Catholic	do	50 00
Peter Riel	Scotland	Presbyterian	do	150 00
Jos. Pierson	Prince Edward Co.	Methodist	do	100 00
Peter Huff	do	do	do	50 00
W. A. Palen	do	Presbyterian	do	50 00
John G. Hicks	Marysburgh	Methodist	do	100 00
W. Plews	England	do	do	100 00

* Captain Scott receives a salary as Chairman of the Board of Examiners of Masters and Mates, but no Salary as Captain of the Steamer *Lady Head.*

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of Ontario.*)—*Continued.*				
Jos. K. Cameron	Scotland	Presbyterian	Fishery Overseer	100 00
Charles Wilkins	Carrying Place	Episcopalian	do	200 00
Sam. Wilmot		do	Fishery Officer	1,200 00
John W. Kerr	Ireland	do	Fishery Overseer	300 00
Henry Groves	England	Baptist	do	50 00
P. Marentelle	Sandwich	Catholic	do	150 00
S. A. MacVicar	Canada	Episcopalian	do	200 00
John Eastwood	England	Presbyterian	do	100 00
Farquhar McRae	Scotland	Catholic	do	100 00
Geo. S. Miller	Ireland	Protestant	do	100 00
Wm. Plummer	England	Episcopalian	do	100 00
Jos. Wilson	Scotland	Presbyterian	do	100 00
Alex. McKenzie	do	do	do	50 00
W. H. Shipman	New Jersey, U. S.	Methodist	do	50 00
James Bird	England	Episcopalian	do	100 00
DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of Quebec.*)				
A. Blais	Montmagny	Episcopalian	Fishery Overseer	300 00
Jos. J. Létourneau	St. Thomas	do	do	50 00
P. Vibert	Gaspé	do	do	No Salary.
J. Eden	do	do	do	50 00
James M. Remon	Jersey, G. B	do	do	50 00
Wm. Phalen	Ireland	Catholic	do	50 00
R. W. H. Dimock	New Richmond	Episcopalian	do	100 00
C. P. Beauchisne	Bécancour	Catholic	do	50 00
John Mowat	Scotland	Presbyterian	do	150 00
Phillip Vibert, jun	Madawaska, N. B.	Catholic	do	200 00
J. Demeule	Malbaie	do	Fishery Warden	50 00
F. Saillant	Quebec	do	Fishery Overseer	50 00
Geo. Riverin	Malbaie	do	do	50 00
W. H. Austin	Georgeville	Baptist	do	100 00
W. F. Willis	Ireland	Protestant	do	150 00
H. W. Austin	England	do	do	100 00
D. McFarlane	Scotland	Presbyterian	do	50 00
P. E. Luke	Canada	Episcopalian	do	50 00
Daniel Rosa	Quebec	Catholic	Fishery Warden	50 00
L. P. Huot	Montmorency	do	do	50 00
Felix Sylvestre	Berthier	do	Fishery Overseer	100 00
G. Mathurin	Montmagny	do	do	50 00
Frs. Thivierge	do	do	do	50 00
Prudent Fournier	L'Islet	do	do	50 00
M. L. Holland	Ireland	Protestant	do	100 00
J. J. Fox	Gaspé	do	do	50 00
Edouard Pelletier		Catholic	do	50 00
DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of Nova Scotia.*)				
W. H. Rogers	Nova Scotia	Methodist	Fishery Officer	800 00
Cumberland County.				
Thos. H. Patton	Cumberland Co'ty.	Baptist	Fishery Overseer	100 00
Oliver Fillmore	do	do	Fishery Warden	25 00
David Stewart	Ireland	Methodist	do	25 00
Jeremiah Brounell	Cumberland Co'ty.	Presbyterian	do	25 00
Asa Fillmore	Nova Scotia	Baptist	do	25 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

Names.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of Nova Scotia.*)—*Continued.*				
Cumberland County.—Continued.				
Geo. Dimock	Nova Scotia	Baptist	Fishery Overseer	100 00
David Corbett	do	Presbyterian	Fishery Warden	25 00
Moses Harrison	do	Episcopalian	do	25 00
John H. Barnes	New Brunswick	Methodist	do	25 00
Fras. L. Jenks	Nova Scotia	Baptist	do	25 00
W. C. Rindress			do	30 00
Annapolis County.				
W. T. Carthy	Nova Scotia	Methodist	Fishery Overseer	120 00
Geo. Harduick	do	do	Fishery Warden	25 00
John H. Hicks	do	do	do	25 00
James Vidibol	do	Baptist	do	25 00
B. Le Cain				25 00
Digby County.				
James H. Morehouse	Nova Scotia	Methodist	Fishery Overseer	120 00
Wm. Odell	do	Protestant	Fishery Warden	25 00
Basil R. Robicheau	New Brunswick	Catholic	do	25 00
Lochlin McKay			do	25 00
Robt. Journey	Nova Scotia	Episcopalian	do	25 00
John P. Thibodeau	do	Catholic	do	25 00
Queen's County.				
Sam. T. N. Sellon	Nova Scotia	Methodist	Fishery Overseer	120 00
Stephen Clements	do	do	Fishery Warden	25 00
Theodosius Ford	do	do	do	25 00
Wm. Buchanan	do	Presbyterian	do	20 00
Henry Hooker	do	Episcopalian	do	30 00
John Fitzgerald	Ireland	Catholic	do	30 00
Barnabas Miles	Nova Scotia	Baptist	do	20 00
Stephen Smith	do	Episcopalian	do	20 00
Jonathan Smith	do	Presbyterian	do	15 00
James Farquhar	do	Methodist	do	30 00
Shelburn County.				
Wm. Muir, jun	Nova Scotia	Episcopalian	Fishery Overseer	125 00
David Powell	Wales	Methodist	Fishery Warden	20 00
W. McKay	Nova Scotia	Presbyterian	do	20 00
Matthias Greenwood	do	Protestant	do	20 00
Geo. Acher	do	Episcopalian	do	15 00
Richard McGill	do	Presbyterian	do	20 00
James Turner			do	30 00
Lathrop Freeman	Nova Scotia	Baptist	do	20 00
Henry Ackerman	do	Episcopalian	do	20 00
Halifax County.				
Ezekiel Sibley	Nova Scotia	Presbyterian	Fishery Overseer	100 00
Wm. Guild	do	do	Fishery Warden	40 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of Nova Scotia.*)—*Continued.*				
Halifax County.—Continued.				
Wm. Hall	.....	.....	Fishery Warden	40 00
John Fitzgerald	Nova Scotia	Catholic	Fishery Overseer	100 00
Archibald Kidston	do	Presbyterian	Fishery Warden	40 00
Geo. Deauphiné	do	Episcopalian	do	40 00
Victoria County.				
Donald McRae, jun.	Nova Scotia	Presbyterian	Fishery Overseer	120 00
John McLellan	Scotland	do	Fishery Warden	25 00
Donald McQuarrie	Nova Scotia	do	do	25 00
Donald McMillan	Scotland	do	do	25 00
Angus McKenzie	do	Protestant	do	25 00
Donald McRae	do	Presbyterian	do	25 00
Pictou County.				
Walter Murray	Nova Scotia	Presbyterian	Fishery Overseer	100 00
Geo. Murray	do	do	Fishery Warden	25 00
Donald Rankin	do	do	do	25 00
Thomas Graham	do	do	Fishery Overseer	100 00
Wm. Smith	do	do	Fishery Warden	30 00
Wm. Graham	do	do	do	25 00
Robt. Archibald	do	do	do	25 00
Daniel Creighton	do	Protestant	do	25 00
John Cameron	do	Presbyterian	do	25 00
James McMillan	do	do	do	25 00
Angus McDonald	do	do	do	20 00
Cape Breton County.				
Francis Quinan	Nova Scotia	Catholic	Fishery Overseer	120 00
Anthony Spencer	do	Baptist	Fishery Warden	25 00
Thos. Burke	P. E. Island	Catholic	do	25 00
John McEachen	Scotland	do	do	25 00
Thos. Moore	Nova Scotia	Baptist	do	20 00
Donald McDonald	.....	.....	do	20 00
Alex. McLean	.....	.....	do	.....
King's County.				
Benjamin E. Smith	New Brunswick	Episcopalian	Fishery Overseer	125 00
John E. Starr	Nova Scotia	do	do	125 00
W. McIntyre	.....	.....	Fishery Warden	30 00
Henry C. Eagles	.....	.....	do	20 00
John Buchanan	.....	.....	do	20 00
Colchester County.				
Wm. Blair	Nova Scotia	Baptist	Fishery Overseer	100 00
Richard C. Archibald	do	Presbyterian	Fishery Warden	25 00
J. W. Davidson	do	do	Fishery Overseer	100 00
Samuel Frame	do	do	Fishery Warden	25 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of Nova Scotia.*)—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
Colchester County.—Contniued.				
Robt. J. Pollock	Nova Scotia	Presbyterian	Fishery Warden	25 00
Geo. Fulton	do	do	do	25 00
James Bonyman	do	Swedenborgian	Fishery Overseer	40 00
Henderson Sass	do	Presbyterian	Fishery Warden	25 00
Robt. Fletcher	do	do	do	25 00
Henry Urquhart			do	25 00
Henry M. Fulton	Nova Scotia	Presbyterian	do	25 00
John A. P. McLellan	do	do	do	25 00
Jas. B. Gilbert			do	20 00
Andrew Howe, jun			do	20 00
Yarmouth County.				
T. B. Crosby	Nova Scotia	Baptist	Fishery Overseer	100 00
Robt. Baker	do	do	Fishery Warden	25 00
J. A. Hatfield	do	do	do	25 00
Wm. Kavanagh			do	25 00
Wm. Prosser	England	Baptist	do	25 00
Eustace Nickerson	Nova Scotia	do	do	25 00
Edward Perry	do	do	do	25 00
Lunenburg County.				
Daniel Dimock	Nova Scotia	Baptist	Fishery Overseer	100 00
Ebenezer Frail	do	do	Fishery Warden	25 00
Jas. Corkum	do	do	do	25 00
Benjamin Reddy	do	Episcopalian	do	25 00
David Vienot	do	do	do	25 00
Jas. Langille	do	do	do	25 00
Henry S. Jost			Fishery Overseer	100 00
Chas. Pernette	Nova Scotia	Episcopalian	Fishery Warden	25 00
Jas. E. Dauphiné	do	do	do	25 00
Jas. Mossman	Kingsburg, Lunenburg Co	Presbyterian	do	25 00
Edward Morgan	Annapolis County	Methodist	do	25 00
W. Vienot			do	25 00
Geo. A. Nesbitt			do	25 00
Inverness County.				
Murdock A. Ross	Nova Scotia	Baptist	Fishery Overseer	100 00
Peter Coady	England	Catholic	Fishery Warden	25 00
John Carmichael	N. E. Morgam, C. Breton	Methodist	do	25 00
Arch. McDougall	Scotland	Catholic	do	25 00
Reuben Phillips	Nova Scotia	Protestant	do	25 00
John McRae	Scotland	Catholic	do	25 00
W. Grant	Nova Scotia	do	Fishery Overseer	100 00
Bernard Dyer	do	do	Fishery Warden	25 00
Angus McIntyre	do	Presbyterian	do	25 00
Donald McDonald	do	Catholic	do	25 00
Angus Cameron	do	Presbyterian	do	25 00

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of Nova Scotia.*)—*Continued.*				
Richmond County.				
Duncan Cameron	Nova Scotia	Catholic	Fishery Overseer	125 00
Alex. Urquhart	Scotland	Presbyterian	Fishery Warden	30 00
Hector McKinnon	Nova Scotia	do	do	30 00
John H. Ballum	do	Episcopalian	Fishery Overseer	125 00
Peter W. Grouchery	do	do	Fishery Warden	30 00
John Proctor, sen.	do	Catholic	do	30 00
Hants County.				
Peter S. Burnham	Nova Scotia	Methodist	Fishery Overseer	100 00
John W. Dinsmore	do	Presbyterian	Fishery Warden	30 00
James Masher	.....	.....	do	30 00
Tim. B. O'Brien	Nova Scotia	Presbyterian	Fishery Overseer	100 00
Jos Mosher	do	do	Fishery Warden	30 00
James M. O'Brien	do	do	do	30 00
Guysboro' County.				
James A. Tory	Nova Scotia	Protestant	Fishery Overseer	150 00
James Cook	Guysboro'	Baptist	Fishery Warden	25 00
W. P. Carritt	Nova Scotia	Episcopalian	do	20 00
Charles Kenny	.....	.....	do	15 00
Donald Gunn	Scotland	Presbyterian	do	30 00
W. Pride	Nova Scotia	Episcopalian	do	30 00
Thos. McKeen	do	Presbyterian	do	30 00
Edward Jordan	.....	.....	do	30 00
Robert McKay	Nova Scotia	Baptist	do	15 00
James R. Bruce	do	Protestant	do	10 00
James Nickerson	do	do	do	15 00
Antigonish County.				
Richd. Smith	.....	.....	Fishery Overseer	125
Angus McDonald	Gulf Shore, Pictou County	Roman Catholic	do Warden	30
Alex. Chisholm, jun	.....	.....	do do	25
Albert Randall	Nova Scotia	Protestant	do do	15
Colin Chisholm	do	Catholic	do do	25
Angus McDonald	Morrowstown, Antigonish County.	do	do do	25
Jno. Cumming	Nova Scotia	Presbyterian	do do	20
Jno. Dexter	do	do	do do	30
Jno. Smith	.....	.....	do do	25
James McLean	Nova Scotia	Catholic	do do	25
Hugh Cameron	do	Presbyterian	do do	25
Duncan Fraser	do	Catholic	do do	20
DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of New Brunswick*).				
W. H. Venning	Canada	Episcopalian	Inspector of Fisheries	1,400

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Pvovince of New Brunswick.*)—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts.
County of Restigouche				
E. Ferguson	Scotland	Presbyterian	Fishery Overseer	100
Wm. McMillan	do	do	do do	100
Jno. Gallraith	do	do	do Warden	25
James McMillan	do	do	do do	25
County of Gloucester.				
James Hickson	New Brunswick	Episcopalian	Fishery Overseer	250
Juste Hache	do	Catholic	do do	100
Justinian Savoy	do	do	do do	30
Jno. L. Veno	do	do	do Warden	30
Wm. Bateman	do	Episcopalian	do do	50
Saml. Miller			do do	
County of Northumberland.				
Thomas Savoy	New Brunswick	Catholic	Fishery Overseer	30
Thos. Harris	do	Presbyterian	do Warden	30
Amos Perley	do	do	do Overseer	100
Christopher Parker	do	Methodist	do do	160
N. B. T. Underhill	do	Episcopalian	do do	160
John Hogan	do	Catholic	do do	160
Aaron Hovey	do	Episcopalian	do Warden	30
Geo. Bryanton	England	Methodist	do do	30
Kenneth Cameron	New Brunswick	Protestant	do Overseer	100
Henry Vye, sen	do	Baptist	do Warden	30
Patrick Bergin	Ireland	Catholic	do do	30
Thos. Smith	do	do	do do	30
David Somers	New Brunswick	Baptist	do Overseer	30
Jared Tozer	do	do	do Warden	30
Denis Hogan	Ireland	Catholic	do do	30
Thomas McKenzie	New Brunswick	do	do do	30
Robt. Brimner	do	Presbyterian	do do	30
John Williston	do	Protestant	do Overseer	100
James Russell	do	Presbyterian	do do	100
County of Kent.				
Chas. Cormier	New Brunswick	Catholic	Fishery Overseer	100
J. McD. Sutherland	Nova Scotia	Presbyterian	do do	50
Thaucis P. Légaré	New Brunswick	Catholic	do Warden	30
A. M. Girouard	do	do	do do	30
D. T. Cormier	do	do	do do	60
Wm. B. Deacon	do	Methodist	do Overseer	60
Jno. Wright	do	Presbyterian	do Warden	60
County of Albert.				
Jno Alcorn	New Brunswick	Methodist	Fishery Overseer	150
Jno. Taylor	do	Baptist	do do	40
Richard Gross	do	do	do Warden	30
Jacob Beck	do	do	do do	30

STATEMENT of the Names, Origin, Creed, Position and Pay of all the Employés of the Dominion Government.—*Continued.*

NAMES.	Origin.	Creed.	Position.	Pay per annum.
				$ cts
DEPARTMENT OF MARINE AND FISHERIES.—FISHERY OFFICERS.—(*Province of New Brunswick.*)—*Continued.*				
County of Charlotte.				
B. L. Cunningham	New Brunswick	Episcopalian	Fishery Warden	30
J. M. Fountain	do	Protestant	do Overseer	100
Patrick Curran	Ireland	Catholic	do do	120
Norman Campbell			do Warden	30
W. B. McLaughlin	Nova Scotia	Baptist	do Overseer	240
Samuel Dick	New Brunswick	Christian	do Warden	30
Robert Dixon	do	Presbyterian	do do	30
County of King's.				
Isaac Foshay	New Brunswick	Episcopalian	Fishery Overseer	100
Samuel F. Ryan	do	Methodist	do Warden	30
Samuel Gosline	do	do	do Overseer	50
County of Queen's.				
Isaiah Langan	New Brunswick	Baptist	Fishery Warden	30
Jno. Secord	do	do	do do	30
Reuben Hoben	do	do	do Overseer	100
County of York.				
James Campbell	Scotland	Presbyterian	Fishery Warden	30
Wm. Browne	New Brunswick	Baptist	do do	30
Alex. Moir	do	Fresbyterian	do do	30
Chas. McPherson	do	do	do Overseer	150
County of Carleton.				
Hugh Miller	Scotland	Prteta	Fishery Overseer	30
Hugh Harrison	New Brunswick	os	do do	100
George Stickney	do	Baptist	do Warden	30
Touissant Tremblay	Quebec	do	do do	30
County of Victoria.				
John Jamer			Fishery Warden	30
Chas. McCloskey	Ireland	Catholic	do Overseer	100
Donald Fraser			do Warden	30
George Bedell	New Brunswick	Episcopalian	do Overseer	30
John McDougall			do Warden	30
County of St. John.				
R. N. Venning	New Brunswick	Episcopalian	Clerk to Inspector of Fisheries	400
Cyprian E. Goddard	do	do	Fishery Overseer	150

(No. 39.)

RETURN

To AN ADDRESS of the HOUSE OF COMMONS, dated 16th April, 1872; For Copies of all Correspondence between the Government of the Dominion, that of the Province of Quebec, and the Honorable Mr. Justice Bossé, with respect to the refusal of that Honorable Judge to comply with the order of the Government of Quebec, directing him to reside at Montmagny, in the District of Montmagny.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 30th April, 1872.

(No. 40.)

RETURN

To AN ADDRESS of the HOUSE OF COMMONS, dated 22nd April, 1872; Asking for Copies of all the Correspondence passed between the Postmaster of Halifax, N.S., and the Honorable Postmaster-General, relative to the abstraction of Money Letters from the Post Office, and what satisfaction (if any) has been made to the sufferers.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 6th May, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing, the above Returns are not printed.*]

(No. 41.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 18th April, 1872; For a Return of all the Customs Duties collected at Hudson's Bay Ports on Hudson's Bay, 1868–69, 1869–70 and 1870–71.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 7th May, 1872.

(No. 42.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 1st May, 1872; For Copies of all Plans, Reports, Specifications and Contracts relating to the Improvement of the navigation of the Rivers Thames and Sydenham since 1867.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 8th May, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing, the above Returns are not printed.*]

RETURN

To an Address of the HOUSE OF COMMONS, dated 1st May, 1872;—For copies of all correspondence, reports and plans relating to the Paspebiac Harbour roadstead, first, as a Harbour of Refuge; second, as a Winter Harbour, communicating with the Intercolonial Railway.

By Command.

J. C. TAIKINS,

Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 8th May, 1872.

(No. 14,618.)

OTTAWA, May 7th, 1872.

SIR,—I have the honor to transmit herewith copy of a report and plan relative to the Paspebiac Harbour roadstead asked for by an Address of the House of Commons, dated the 1st instant.

I have the honor to be, Sir,
Your obedient servant,
J. BRAUN,
Secretary.

Honorable the Secretary of State
for Canada, Ottawa.

(Copy of No- 20,595.)

OTTAWA, 18th January, 1872.

SIR,—During the last session of the Dominion Parliament, I submitted to the attention of the House, a few considerations relative to the importance,

1st. Of making Paspebiac a Harbor of Refuge; and

2nd. Of using it as a winter and summer harbor, with a view to shorten the distance between Liverpool and America, as compared with the present routes by Halifax, Portland or New York. I have since asked the Honorable the Minister of Public Works, to have a survey made of that bay, and I now beg to call your attention to the following facts:—

Paspebiac Bay situate on the north side of Bay des Chaleurs, nearly opposite Shippegan; Latitude 48° 1' 0" N., Longitude 65° 14' 30" W., is bounded on the east by a sandy beach, projecting out three-quarters of a mile, called Paspébiac Point. On the west by another sandy beach, projecting out one-third of a mile, and called New Carlisle

Point. On the north side by the mainland, which describes a semi-circle four-fifths of a mile in depth, presenting a cliff of red sand stone about forty feet in height, and on the south by the Bay des Chaleurs, which here forms an open sheet of water, fourteen miles across, unimpeded by islands, reefs, shoals or any other obstructions. The distance from New Carlisle to Paspébiac Point, is three miles and three-quarters, and the depth of water on a line from point to point varies from six to eight fathoms. Over the anchorage ground, the depth of water varies from four and one-half to six fathoms, and vessels of war anchor there almost every summer.

Paspebiac Bay is free from ice, as well as Bay des Chaleurs for thirty miles above. Whatever ice may be formed in Bay des Chaleurs, or brought in by easterly gales, is kept on the south side of the bay by the currents, and the prevalent land breeze; and the climate is milder than at Quebec or Montreal.

There is a great deal of shipping from Paspébiac, as may be ascertained from the returns of the Custom House of New Carlisle; there being a direct trade with the Mediteranean Ports, Brazil, England, the United States, the West Indies, Newfoundland, Halifax, Prince Edward Island, Quebec and Montreal.

Paspebiac Bay is the place of resort for all vessels navigating in the bay and at the entrance of the gulf, against gales of easterly winds; and by an outlay of a few thousand dollars, it could be made a safe harbor of refuge against the south and south-west gales which at present are very often disastrous.

As respects the relative distances, the following table shows that while Liverpool is nearer to Quebec via Cape Race and Paspebiac by about 197 miles than either Halifax or Portland, the water voyage through the Straits of Belle Isle would be shortened by railway connection to Quebec via Paspebiac some 287 miles:—

			Miles.	
1.	Distance from	Liverpool to Cape Race.....	1,970	
	,,	Cape Race to Paspebiac.	490	
	,,	Paspebiac to Quebec (by land)	411	
				2,871
2.	,,	Liverpool to Belle Isle	1,878	
	,,	Belle Isle to Quebec.....	737	
				2,515
3.	,,	Liverpool to Belle Isle	1,878	
	,,	Belle Isle to Paspebiac.....	440	
	,,	Paspebiac to Quebec (by land).....	411	
				2,729
4.	,,	Liverpool to Cape Race.....	1,970	
	,,	Cape Race to Halifax (by water).....	463	
				2,433
	,,	Halifax to Quebec (by land).....	635	
				3,068

The distances are taken from Mr. Fleming's report of 1864, given on a line from Liverpool to Shippegan, in which the measurements are almost identical with those to Paspebiac.

The foregoing statements, I feel convinced, sufficiently establish the primary advantages of selecting Paspebiac as a harbor of refuge and a winter port, and I have the honor to urge upon the Government the desirability of making, as early as possible, an official survey of that locality, with a view to determining its capabilities, and to ascertain the estimated cost of rendering the same available in such an important and necessary public improvement.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) THEODORE ROBITAILLE.

PUBLIC WORKS,
OTTAWA, 25th January, 1872.

(Copy—No. 13,411.)

SIR,—I am directed by the Minister to enquire whether Mr. Grant the engineer has visited Paspebiac Bay, and whether he has reported the result of his examination of the harbor at that place; also whether, in the event of his not having yet been there, Mr. Grant would still have time to do so after the end of the present month.

I have the honor to be, Sir,
Your obedient servant,
(Signed,) F. BRAUN,
Secretary.

Sandford Fleming, Esq.,
Engineer in Chief,
Intercolonial Railway,
Ottawa.

(Copy—No. 20,905.)

INTERCOLONIAL,
CHIEF ENGINEER'S OFFICE,
OTTAWA, February 2nd, 1872.

F. Braun, Esq.,
Secretary, Public Works.

SIR,—In reply to your letter of 21st January, respecting Mr. Grant's visit to Paspebiac Bay, I beg to explain that the reason given to me why he has not made the visit before now, is that he has been unwell. It is, however, intended that he shall start for Paspebiac very soon, say within ten days.

Yours truly,
(Signed,) SANDFORD FLEMING.

(Copy—No. 22,291.)

OTTAWA, April 17th, 1872.

F. Braun, Esq.,
Secretary, Public Works.

SIR,—I beg to enclose a copy of a plan and report for a railway from Metapedia to Paspebiac on the Bay of Chaleur, as well as remarks on a proposed harbor at the latter place.

The examination and report was made by Mr. Peter Grant in accordance with instructions received from the Minister.

I am, &c.,
(Signed,) SANDFORD FLEMING,
Chief Engineer.

(No. 22,291.)

INTERCOLONIAL RAILWAY, ENGINEER'S OFFICE,
RESTIGOUCHE DISTRICT, Section No. 19,
Metapedia, 30th March, 1872.

SIR,—In accordance with your instructions arising from a letter written by Theodore Robitaille, Esquire, M. P., bearing date 18th January, 1872, I have the honour to submit the following report to be laid before the Honorable the Commissioner of Public Works, with a view of furnishing information relative to the merits and capabilities of a winter harbour and harbour of refuge at Paspebiac on the Bay of Chaleur and the forming of a railway connection with some point of the Intercolonial, by which means a much shorter route will be obtained to Britain, than any at present existing.

In order to arrive at satisfactory conclusions, I proceeded to make a survey of reconnaissance, and left Matapediac on the 13th instant for that purpose. Arriving at Paspebiac on the 15th, was surprised to find so little ice in the bays and that only slush, notwithstanding that for the previous ten days a strong easterly wind with intense frost had prevailed. From any local information to be gathered, it would appear, that I saw it in its worst state, and that it is usually free from ice during the winter, the harbour never being blocked with ice nor does ice of any consequence (except slush) remain in the Bay of Chaleur on the north side for thirty miles above Paspebiac.

I would now insert a short description of the harbour. Paspebiac Bay is situated on the north side of the Bay of Chaleurs, opposite Grand Anse, and north west of Shippegan, in Latitude 48° North, and Longitude 65¼° West. It is bounded on the east by a sandy beach, (gradually increasing) extending outwards about three-quarters of a mile, called Paspebiac Point, on the west by another sandy beach projecting about one-third of a mile, called New Carlisle Point. The bay is semi-circular about four-fifths of a mile in depth, the distance between the points is about three and a half miles with a depth of water on the line varying from six to eight fathoms over the anchorage ground inside the points. The depth of water varies from four-and-a-half to six fathoms. The tide rises to a height of about four feet. Vessels of war anchor here almost every summer. The coast presents a cliff of red sandstone about forty feet in height. The Bay of Chaleur at this point is an open sheet of water fourteen miles across, unimpeded by islands, reefs, shoals or any other obstructions whatever. Ice formed in the bay, or drifted in by the easterly gales, is kept on the south side by the prevalent land breeze, which renders the climate more temperate than Quebec or Montreal.

Paspebiac is the place of shelter resorted to in easterly storms by all vessels navigating the Bay of Chaleur and entrance of the Gulf. The following table (copied from Mr. Fleming's Report, 1864, on Shippegan Harbour, the position of which is almost identical with Paspebiac) shews the comparative distances between Liverpool and Quebec *via* Paspebiac and *via* Halifax :—

			Miles.	
1.	Distance from Liverpool to Cape		1,970	
	„	Cape Race to Paspebiac	490	
	„	Paspebiac to Quebec (by land)	411	
				2,871
2.	„	Liverpool to Belle Isle	1,878	
	„	Belle Isle to Quebec	737	
				2,615
3.	„	Liverpool to Belle Isle	1,878	
	„	Belle Isle to Paspebiac	440	
	„	Paspebiac to Quebec (by land)	411	
				2,729
4.	„	Liverpool to Cape Race	1,970	
	„	Cape Race to Halifax (by water)	463	
				2,433
	„	Halifax to Quebec (by land)	635	
				3,068

From the ample depth of water close into the shore, the admirable shelter afforded from the prevailing winds, and the freedom from ice, I have no hesitation in stating that the bay is well adapted for a winter harbor and also for a harbor of refuge ; by a moderate expenditure it can be made available for shipping purposes. Notwithstanding the want of pier accommodation, a large shipping business is done during the summer months with all parts of the world, which will be shewn by the Custom House returns. This would be vastly increased by proper harbour facilities and railway connection, in addition to which would be the immense public benefit derived from the English mail and other steamers being able to use it as a winter port.

For further information, I beg to refer to the accompanying map in which I have endeavoured to show the position of the harbor, the points of shelter and the depth of water.

I have roughly examined the country between Metapediac and Paspebiac, a distance of about 100 miles to ascertain the feasibility of constructing a line of railway to connect with the Intercolonial Railway at the former point, with the exception of a few miles immediately east of Metapcdiac, and about one mile east of Little Cascapediac (which is somewhat more difficult) the country presents a level and uniform surface, free from all engineering obstacles, and is admirably adapted for the construction of a cheap line of railway. Only three (3) rivers of any importance will have to be crossed, viz., the Big Cascapediac, about 65 miles east from Matapediac, requiring a bridge of two spans, say 200 feet each. This is the lower crossing shown on the plan; the one shown about a mile further up can be accomplished at a much less cost. At both crossings, the river flows from one to four feet deep over a bed of rock. Lime and sandstone is abundant on the ground. The Little Cascapediac, about five miles farther east, can be crossed with a bridge of one span, say 100 feet.

This river is very shallow, and also runs over a bed of rock—a quarry of good stone is being worked in the immediate vicinity. The Bonaventure River, about thirteen miles west of Paspebiac, will require a waterway of, say, 150 feet; this bridge which may be of one or two spans, will be near the head of the tide, where the depth of water is about three feet on a bed of rock. A first class quarry of red sandstone is being worked a little further up the river.

The minor rivers Escuminac, Nouvelle, Little Bonaventure and Caplin, will require small bridges, say, fifty feet spans. There are but few small streams requiring culverts, and the number of culverts for drainage purposes, will be remarkably small comparatively with the length of railway.

The country through which the line will pass is fertile and well adapted for agriculture for many miles inland.

Along the coast it is thickly populated and in very prosperous condition. The several townships, which the proposed line of railway will intersect, possess an aggregate population of, say 20,000, and in every township there are several large business establishments in lumbering, fishing, &c. I would particularly draw attention to the enormous business done by the Messrs. Robin and Le Boutilliers, at Paspebiac, and several other stations. Their united importations of flour alone, is upwards 16,000 barrels per annum, and of pork over 3,000 barrels, to which add a large amount of farm produce from all parts of the country. In addition to the section traversed by the line of railway a large and fertile tract of country North-east of the terminus, containing a population of about 19,000, will be materially benefited.

From the foregoing date, I have arrived at the following conclusions, viz. :—

That a good winter harbor can be constructed at Paspebiac, and a very cheap and paying line of railway can be built from Matapediac on the Intercolonial to the former point. This line will open up a fine agricultural country for settlement, and not cost one half the rate per mile of the Intercolonial and still be of the same substantial workmanship.

For more minute particulars, I beg to refer to the accompanying plan, on which I have shewn the proposed line of railway, by a drawn red line, terminating at the proposed winter port and harbor of refuge of Paspebiac.

In conclusion, I would strongly recommend that an instrumental survey be made in order to ascertain more minutely the facilities and cost of carrying out the proposed important work.

I have the honor to be, your most obedient servant,

(Signed,) PETER GRANT.

Sandford, Fleming, Esq.,
Chief Engineer,
Intercolonial Railway, Ottawa.

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 16th April last, asking for copies of Report of Engineers or others appointed to investigate the location of the Canal across the St. Clair Flats, on the Canadian side of the Channel, by the Government of the United States, with copies of all Orders in Council, and the Correspondence with the Imperial Government, or others, on the subject.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 1st May, 1872.

CHATHAM, July 6, 1870.

MY DEAR SIR,—I have just received the herewith enclosed, from H. Little, Esq. His seems to be a very hard case, and I do trust that the Government will act promptly in the premises. Without a shadow of doubt, the spot where Mr. Little's steam barge and wood scow were seized, was within the Canadian boundary line. (See Commissioners Porter and Barclay's Report, made 1822.) The feeling here, in connection with this out rage on our shipping, is intense. Be so kind as to advise me of the Government's action, as soon as convenient.

I have, &c.,
RUFUS STEPHENSON.

Hon. J. C. Aikins,
Secretary of State, Ottawa.

STATEMENT

Of facts with reference to the seizure of the steam barge "Reindeer" of Wallaceburg, at the St. Clair Flats, also the wood barge "Campbell."

1st, The said barges are owned by Hiram Little, of Wallaceburg, in the County of Kent and Province of Ontario.

2nd. The said steam barge is twenty-three tons burthen, propelled by a propeller steam engine, is of the value of $2,300, and the said wood barge is of the value of $200.

3rd. That the said steam and wood barges took on a cargo of cordwood, at the River Sydenham, in the County of Kent, to be discharged at the St. Clair Flats, at the woreks, or canal now in course of construction, by John Brown, for and on account of the American Government.

4th. That on Monday, the twenty-sixth day of June last past, the said two barges arrived at the canal or channel now in course of construction, and, on the westerly side thereof, discharged their cargo of cordwood, which wood was for the said Brown, and to be used for and in the construction of said canal, the said two cargoes amounting to fifty-eight cords.

5. That, while the said barges were in the act of discharging their cargo, three Revenue Officers from the City of Detroit, in the State of Michigan, seized the said two barges and their cargo; and on the twenty-seventh day of June, being the next day after the seizure, the said Hiram Little proceeded from Wallaceburg to where the said Barges were seized, and, upon arriving there, was arrested by the said officials; and he, and the said barges, and the men in his (Little's) employ, were taken to the City of Detroit under the charge of smuggling wood.

6th. That upon arriving at Detroit, a ship keeper was put in charge by Mr. Jerome, the Collector of Customs.

7th. That the said Collector of the Port of Detroit, suggested that bonds should be given to the amount of $3,000,—$2,500 being for the barges, and $500 for costs. After considerable difficulty, I procured the necessary bondsmen, and released my said barges; and, as to myself, I was released without bail.

8. That I am advised and believe, from the best information that I can obtain from charts used by mariners navigating the Rivers and Lakes, and on reference to the Report of the joint commission of Messrs. Barclay and Porter, bearing date in the year 1822, that my said barges were discharging their cargoes, and were seized within Canadian Territory; and in order the better to understand the position of the said canal or channel, and the position of said Barges when seized, I have caused a diagram thereof to be made and annexed hereto.

9. That the said canal or channel is not completed, and is only used by crafts supplying material used in the construction thereof; and that the principal part or portion of the material used in construction of said canal has been procured in Canada, and until the occurrence aforesaid no duty has been demanded thereon.

Dated at Wallaceburg, this 4th day of July, A.D., 1870.

HIRAM LITTLE.

DEAR SIR—I herewith send you a plain Statement of Facts relative to the unjust seizure of my two Barges by the Ameriean officials at the St. Clair Flats, and I beg that you will, at the earliest moment possible, lay the matter before the Government of the Dominion, and seek for me the redress which I think myself justly entitled.

I am, Sir,

Your obedient servant,

H. LITTLE.

Rufus Stephenson, Esq., M.P.

OTTAWA, 1st August, 1870.

SIR,—In complia nce with your instructions of 16th ult., I proceeded without delay, to enquire into the circumstances of the alleged seizure of the steam barge *Reindeer* and wood barge *Campbell*—with their cargoes of wood, the property of Mr. Hiram Little, of Wallaceburg, by the United States' Customs authorities at Detroit,—and also to ascertain, as far as I might be able, the accuracy of the boundary line as stated between Canada and the United States at the place of seizure, and whether the seizure was made in American or Canadian waters, &c.

With the exception of the error of naming Monday, the 26th of June, as the date of seizure—instead of Monday, the 27th, as it was—Mr. Little's "statement of facts in relation to the seizure" of date 4th July last, may be accepted as correct, and, in corroboration of same, I beg to submit,—

1st. Statement of Wm. A. Moore, Counsellor at Law at Detroit, as follows:—

DETROIT, July 26, 1870.

DEAR SIR,—In reference to your inquiry of yesterday relative to the seizure of the steam barge *Reindeer*, with 26 cords wood, and the barge *Campbell*, with 32 cords wood, I respectfully state as follows:—*Libels* were filed against said vessels and wood on the 29th of June, 1870, by A. B, Manyard, Esq., Attorney of the United States for the Eastern District of Michigan, for and on behalf of the United States, alleging that on various days in the year 1869, and on the 27th June, 1870, and on various days prior to the said 27th of June, 150 cords of wood, of the value of $400, were imported into the United States upon said barge *Campbell* from the Province of Ontario, and were unladen without permit or without payment of duty, and contrary to the Statute. That the 27th day of June, 1870, and on various other days during the year 1870, and on various days during the year 1869, 150 cords of wood, of the value of $400, were imported on the steam barge *Reindeer* from the Province of Ontario, without a permit from the Collector, without payment of duty, and contrary to the Statutes. That, in both cases, the libel alleges that the vessel and wood are forfeited to the United States.

Both vessels and wood were *bonded* by Mr. Little, of Wallaceburg.

G. McMicken, Esq.

No answer has yet been filed, but probably will be by Tuesday next. The principle question seems to be whether the newly dredged channel across the St. Clair Flats is in American or Canadian waters. Any further inquiry I shall be pleased to respond to.

Respectfully yours,
(Signed), W. A. MOORE.

And 2nd. The statement of Mr. C. B. Bennet. Clerk for Mr. Brown, the contractor for the Canal across the St. Clair Flats, and obtained on the spot.

July 23rd, 1870.

I am book-keeper for Mr. John Brown, contractor for the construction of the St. Clair Flats Ship Canal. On Monday, the 27th of June last, United States Revenue Officers, Messrs Bloss and LaFevre, of Detroit, Michigan, came to the office, and informed me that they had seized the barge *Reindeer* and scow *Campbell*, property of Mr. Hiram Little, of Wallaceburg, Ontario, together with their cargoes of wood, which they were unloading on the west pier of this Canal, also stated that they had been informed that Mr. Brown had been purchasing his wood and supplies in Canada, and demanded a statement of all the wood and supplies and other articles used in the construction of this work received here from Canada. On Tuesday morning Mr. Little arrived here from Wallaceburg; I went with him to the Lighthouse, and had an interview with the Revenue Officers who made the seizure. Mr. Little protested against the seizure of his boats in the waters of this Canal, for the reason that he had always understood that to the east of the Old Ship Channel was on the Canadian side of the boundary line, and that he was delivering his wood here in good faith;—that he had a right to do so. I contracted with Mr. Little for the delivery of this wood, and have purchased wood from him every season since this work commenced.

The question whether wood coming here from Canada was liable for duty has never been spoken of between us, neither has there been any Revenue Officer here to ask any questions about it before the seizure above referred to. Mr. Brown has paid duties on all scows, machinery and all articles used for the construction of this work brought here from Canada.

The work has been in progress three years. Mr. Little proposed to take the boats to Algonac, Michigan, and he would *bond* them until the question was settled; the officers replied that they had no authority to bond them, and that they must take them to Detroit. At the request of the Revenue Officers, Mr. Little's men took the boats to Detroit—with Mr. Little and officers on board.

(Signed), C. B. BENNET.

The seizure having therefore been made, the question of the right of the United States Customs' Officers to make it, turns upon the question—as stated by Mr. Moore—"whether the newly dredged channel across the St. Clair Flats is in American or Canadian waters?

A preliminary examination of this kind, having for its chief object to ascertain whether there are satisfactory reasons for interfering on behalf of a claimant, and early action being necessary for his needed relief, time is not afforded for obtaining full and precise data for absolutely determining a boundary line between two countries; but so far as means and opportunity were afforded me, I have obtained such information as leads to a thorough conviction that the new Canal now being constructed across the St. Clair Flats by the Government of the United States, and where the seizure of the boats and wood of Mr. Little was made, is wholly and unmistakeably within Canadian waters.

The 6th Article of the Treaty of Peace and Amity between Great Britain and the United States of America, concluded at Ghent, on 24th December 1814, reads thus:—

"Whereas, by the former Treaty of Peace, that portion of the boundary of the United States from the point where the forty-fifth degree of north latitude strikes the River Iroquois or Cataraguy to the Lake Superior, was declared to be 'along the middle of said River into Lake Ontario, through the middle of said Lake, until it strikes the communication by water between that Lake and Lake Erie, thence along the middle of said communication into Lake Erie, through the middle of said Lake until it arrives at the water communication into Lake Huron, thence through the middle of said Lake to the water communication between that Lake and Lake Superior.'

"And whereas, doubts have arisen what was the middle of the said River, Lakes and water communications, and whether certain islands lying in the same were within the dominions of His Britannic Majesty or of the United States: In order, therefore, finally to decide these doubts, they shall be referred to two Commissioners, to be appointed, sworn, and authorized to act exactly in the manner directed with respect to those mentioned in the next preceding Article, unless otherwise specified in this present Article * * * * * * The said Commissioners shall, by a report or declaration under their hands and seals, designate the boundary through the said River, Lakes, and water communications, and decide to which of the two contracting parties the several islands lying within the said Rivers, Lakes and water communications do respectively belong, in conformity with the true intent of the said Treaty of One thousand seven hundred and eighty-three; and both parties agree to consider such designation and decision as final and conclusive. And in the event of the said two Commissioners differing, or both or either of them refusing, declining or wilfully omitting to act, such reports, declarations or statements, shall be made by them or either of them, and such reference to a friendly Sovereign or State shall be made in all respects as in the latter part of the fourth Article is contained, and in as full a manner as if the same was herein repeated."

In accordance with the Article above quoted, two Commissioners were appointed—Peter B. Porter, and Anthony Barclay, respectively, on behalf of the United States and Great Britain.

On the 18th day of June, 1822, the said Commissioners published their decision, which, in so far as it affects the point at issue, reads thus:—

"Thence to the middle of the mouth of the Detroit River, in a direction to enter the channel which divides Bois-blanc and Sugar Islands; thence up the said channel to the west of Bois-Blanc Island and to the east of Sugar, Fox and Stony Islands, until it approaches Fighting or Great Turkey Island; thence along the western side and near the shore of said last mentioned Island to the middle of the River above the same. Thence along the middle of said River, keeping to the south-east of and near Hog Island, and to the north-west of and near the Island called Isle à la Pêche to Lake St Clair; *thence through the middle of said Lake, in a direction to enter that mouth or channel of the River St. Clair, which is usually denominated the Old Ship Channel;* thence along the middle of said channel between Squirrel Island on the south-east and Herson's Island on the north-west, to the upper end of the last mentioned Island, &c., &c."

The said decision having been duly signed and sealed by the two Commissioners on the date mentioned, became final, and the line of boundary so defined by them must govern this inquiry.

The only point upon which (as it appears to me) a question could possibly be raised, is as to where the point designated as "the mouth of the Old Ship Channel" is? If, as some would say, it is in deep water on the upper side of the Flats, then the line would run up through the Lake into the River, very nearly upon the line of the new Canal, and Canada would have no deep channel of water communication with the River St. Clair from the Lake of that name.

The only ground, so far as I have been able to ascertain, that exists favoring this view, is the fact that on the "Chart of St. Clair Flats, reduced from the original surveys of Captain George G. Meade, T. E., under the direction of Lieut. Col. J. Kearney, T. E., Superintendent of Lake Surveys, shewing also the improvement at the mouth of the South Pass, now being effected by the United States Bureau of Topographical Engineers, 1857," the boundary line is laid down as running directly across the Flats into the deep water of the Lake, and very nearly upon the line of the new Canal; but so far as I can judge, somewhat westward of it still. This line is about two miles to the eastward of the mouth of the channel at present used as the entrance to the South Pass, and which I find has generally been known and accepted as the Old Ship Channel.

From Captain James Hackett, I obtained the following statement:—

"I, the undersigned James Hackett, followed the occupation of mariner on the Lakes for many years. I commenced sailing in the year 1817, and continued in that line of life until I took charge of the Lighthouse on Bois-blanc Island in 1836. I remember the channel which we used to pass between the River and the Lake St. Clair over the Flats very well. We used to come down a reach of about a quarter of a mile through about three fathoms of water to the Elbow Lake; then we turned short to the left in about two fathoms of water for about half a mile to the Bar Stake, where we had about ten or twelve feet of water. We then proceeded on two or three different courses through the Stakes, and in about two fathoms, more or less, until we reached deep water—say about three fathoms and upwards. There was no channel but this one. On either side of it the water was only from four to five feet deep. The Americans used to keep the channel staked out—this was our guide in those days, as we had no maps or charts. The channel I have described was known as the Old Ship Channel."

(Signed,) JAMES HACKETT.

This was made to me at Bois-blanc Island, on 26th July, 1870.

There are several persons known to me, whose evidence can be obtained, if needed, which will be quite as clear and pointed as Captain Hackett's. It may be remarked also, that in many instances since the date of the seizure, several American newspapers have admitted, some the fact, and some the possibility, of the Canal having

been constructed in error within Canadian waters. The following is an extract from the Detroit *Tribune*, a paper not unfriendly to the present Government of the United States :

"The charges of the Canadian journals respecting the alleged illegal arrest of certain "men and vessels by the American authorities, at the new Ship Canal being built on the "St. Clair Flats, seem to have some foundation in fact ; and it is not unlikely that not "only are the American authorities wrong in the seizures, but that the Canal itself may "be entirely in Canadian waters, and a grand dead loss to the American people, after a "great amount of money has been expended upon."

A more recent issue of the chart of the St. Clair Flats, of what date I could not ascertain, *but of the same survey, and printed from the same plate*, does not show the boundary line continued over the Flats,—warranting the inference that the error in laying it down in the first issue, had been discovered and the correction made by expunging it from the subsequent issue.

It may be remarked here, that all vessels built on, or engaged in navigating the lakes of the West, are entitled to receive from the office of the "Lake Survey," charts of the Lakes and Rivers, upon application.

The language of the same paper above referred to, in reference to the change made in the chart, reads thus :—

"On the old maps in the Lake Survey Office here, the dotted boundary line does not "run through this channel entirely, but, coming down, branches off from the channel, "where the latter makes a great detour, and proceeds in almost a direct course, following "the line which the new canal now pursues. But on the more recent maps, "the dotted line, striking off from the channel, is not found at all, and it certainly looks "as though when these were prepared it had become known that this line on the old maps "did not truly represent the boundary, *and it was left again to the curving channel*, "according to the terms of the Treaty."

In the year 1855, the Government of Canada appropriated $20,000 (twenty thousand dollars,) to aid in deepening the Flats of Lake St. Clair.

In 1858, the money was expended, and, in the Report of the Chief Commissioner of Public Works and the Assistant Commissioner, Letter H, dated 17th April, 1858, I find these words :—"The undersigned presume that the channel proposed to be improved, and called in the letter of the Board of Trade 'The South Channel,' is that known in this Province as the 'Middle or Walpole Channel,' the upper portion of which is the boundary line between the United States and Canada, and the lower part is through Canadian territory solely." This clearly shows that then the Chief and Assistant Commissioner of Public Works entertained no doubt whatever that even a portion of the channel navigated, and about two miles west of the canal now being constructed, was in Canadian waters.

I obtained a chart of the more recent issue, which I beg to submit herewith. On it, is laid down the channel now used in navigation.

I have indicated as nearly as possible, by a red dotted line, where the boundary ran, as laid down in the first issue ; and, by a pencil line, the position of the new canal. The latter is not given as exact, but sufficiently so to indicate its position.

Again, referring to the decision of the Boundary Commissioners, I find these words :— "do decide and declare that the following described line (which is more clearly indicated "on a series of maps accompanying this Report, exhibiting correct surveys and delinea- "tions of all the rivers, lakes, water communications and islands embraced by the 6th "Article of the Treaty of Ghent, by a black line, shaded on the British side with red, "and on the American side with blue ; and each sheet of which series of maps is identified "by a certificate, subscribed by the Commissioners, and by the two principal Surveyors "employed by them), is the true boundary intended by the two before-mentioned treaties, "that is to say," &c.

Now a reference to that portion of the series of maps referred to by the boundary Commissioners shewing the line through Lake St. Clair, to the mouth of the Old Ship

Channel as then understood and accepted by the said Commissioners, should readily determine the question at issue.

I have not had opportunity of examining these maps; though, doubtless, they are easily to be had access to at Washington and London, if at any time required. I have obtained, however, and hereby submit a tracing purporting to be a copy of the map of the said Boundary-line Commissioners, shewing the line as they laid it down through Lake St. Clair, and into "the mouth of the Old Ship Channel." The tracing, of which this is a copy, was furnished by the Secretary of the Board of Trade of Buffalo (or by Watson A. Fox, Esq., Chairman of the Dredging Committee) in January, 1856, and previous to the first issue of the Charts by Captain Meade's surveys.

Assuming, then, this tracing to be a correct copy of the map of the Boundary Commissioners,—and there seems to be no reason to doubt its accuracy, it appears quite evident that, as I have already stated, the whole of the Canal now being constructed is within Canadian waters.

This being the case, Mr. Little is clearly entitled to the interference of the Government in his behalf.

I may be permitted, in conclusion, to say that the mistake in the location of the new Canal, affecting, as it does, the control of the main artery of the navigation of the Western Lakes, is one eminently requiring prompt attention, in order that friendly intercourse may be maintained,—the mutual interests of the two countries subserved and secured, and such difficulties as the future might possibly give rise to avoided.

I have the honor to be, Sir,
Your most obedient humble servant,
G. McMicken.

H. Bernard, Esq.,
Deputy of the Minister of Justice,
Ottawa.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 30th August, 1870.

The Committee of Council have had under consideration the annexed Report, dated 26th August, 1870, from the Deputy of the Minister of Justice, concurred in by the Hon. Sir George Et. Cartier, acting for the Hon. the Minister of Justice, on an application on behalf of Hiram Little, respecting the seizure of two vessels belonging to him, and his own arrest at Detroit by the United States authorities, for an alleged attempt to evade the Revenue laws of that country; and they respectfully advise that the recommendations contained in the said annexed Reports be approved and adopted.

Certified,
Wm. H. Lee,
Clerk Privy Council.

Department of Justice,
Ottawa, August 25th, 1870.

The undersigned has the honor to report that a complaint has been made by Mr. R. Stephenson, M.P., on behalf of Hiram Little, of Wallaceburgh, in the County of Kent, in the Province of Ontario, of an outrage committed upon the latter, and seizure of his property by the Customs authorities at Detroit.

From the allegation, it would appear that Little carried certain cordwood to works at the St. Clair Flats, now in course of construction by a Contractor on account of the Government of the United States, without attention to the Customs' regulations of the United States.

Mr. Little alleges that the place at which he delivered the cordwood, is within the boundaries of the Dominion of Conada, and therefore not subject to the laws of the United States; and that the seizure has been wrongful, and to his great detriment.

The petition of Mr. Little was referred to Mr. McMicken, Commissioner of Police, who proceeded to make enquiry into the circumstances of the case, and a full report on the subject is submitted by him herewith.

The facts appear to be as follows:

Hiram Little, being the owner of the steam barge *Reindeer*, and wood barge *Campbell*, was proceeding with the same with cordwood taken on at the River Sydenham, in the County of Kent, to be discharged at the St. Clair Flats at the works or Canal now in course of construction by one, John Brown, for the Government of the United States. The steam barge, being 23 tons burden, propelled by a propeller steam engine, is of the value of $2,300.00, and the wood barge, of the value of $200.00.

That, on the 27th June last, the barges arrived at the Channel and discharged their cargo for the Contracter Brown, for use in the construction of his work; and that whilst so doing, three Revenue Officers from Detroit, seized the two barges and their cargo, and the following day seized Hiram Little himself; and he and the barges and the men in his employ were taken to Detroit for smuggling wood; and a ship-keeper was put in charge by the Collector of Customs at Detroit.

That the Collector suggested that bonds should be given to the amount of $3,000, being $2,500 for the barges, and $500 for costs; upon giving which the barges were released. Little himself was released without bail.

It appears further, that libels have been filed against the vessels and wood by the U. S, District Attorney of Michigan, which allege that the same *are forfeited* to the United States.

The point which is argued on behalf of Mr. Little is, in fact, whether, the newly dredged channel across the St. Clair Flats is in American or Canadian waters? Upon this point, Mr. McMicken states that he has obtained such information as leads to a thorough conviction that the new channel now being constructed by the Government of the United States, and where the seizure of the boats and wood was made, is wholly and unmistakably within Canadian waters. He refers to the 6th article of the Treaty of Ghent, of the 24th December, 1814, and the reference thereunder to two Commissioners to settle the boundaries alluded to in that article, and which would govern this question.

Messrs. Porter and Barclay were accordingly appointed for the United States and Great Britain respectively, and on the 18th June, 1822, they published their decision, and it is submitted that the line of boundary then established by them, and which is set out in Mr. McMicken's Report, is that by which this question should be governed.

It will be seen that Mr. McMicken says that some question may possibly be raised as to the point designated by the Commissioners as "the mouth of the Old Ship Channel," but that such view could only be supported by reference to a chart, to which he makes allusion, and the division line of the Flats marked thereon, and which Mr. McMicken believes must have been made after the award of the Commissioners in 1822.

As to the view of the boundary line which has been taken by Canada hitherto, the same is referred to in the Report of the Chief Commissioner of Public Works of 1858, under which certain money to be expended by the Government of Canada was, the Commissioner presumed, to be for the channel "proposed to be improved, and called in the letter of the Board of Trade, 'The South Channel,' or that known in this Province as the 'Middle or Walpole Channel,' the upper portion of which is the boundary line between the United States and Canada, and the lower part is through Canadian Territory solely."

No doubt, however, should exist on this point, inasmuch as the decison of the Boundary Commissioners is given in precise words, and in which they speak of a series ofmaps exhibiting surveys of all the rivers, lakes and water communications, &c., embraced by the 6th article of the Treaty of Ghent by a black line shaded on the British side with red, and on the American side with blue, subscribed by the Commissioners and principal

Surveyors; and such is spoken of by them as the true boundary intended. It appears impossible at this moment to obtain a copy of that Report or of the plans attached thereto.

It will be observed that Mr. McMicken concludes his report by stating "that the mistake by the Government of the United States in the location of the new Canal, affecting, as it does, the control of the main artery of the Western Lakes, is one eminently requiring prompt attention, in order that friendly intercourse may be maintained, the mutual interest of the two countries subserved and secured, and such difficulties as the future might give rise to, avoided."

Tne undersigned has therefore the honor to suggest that the Governor General should be requested to communicate, through Her Majesty's Minister at Washington, with the United States Government, representing the facts connected with the seizure of the steam barge and wood barge, and also with the personal arrest of the owner, Hiram Little; and further stating that, to save his property, he entered into bonds on account of the same; and claiming that as the seizure was made and the arrest affected on Canadian Territory, the United States Government should issue an order for the cancellation of the bonds so given by Mr. Little, and his release from any liability thereunder, to himself and his sureties; and that due compensation should be awarded to him in respect of the seizure of the barges and of his personal arrest.

The undersigned takes the liberty of suggesting that it is inexpedient to enter into any detail upon the boundary line question, or to act otherwise, in communicating the facts to the Government of the United States, than upon the facts of the seizure having been made on Canadian Territory.

(Signed,) H. Bernard,
Deputy Minister of Justice.

I concur in this report

(Signed,) Geo. Et. Cartier,
Acting for the Minister of Justice.

Windsor, Ontario,
November 22nd, 1870.

Sir,—I have to report that in accordance with your instructions, I proceeded on the 18th inst., in the steam yatch, *Undine*, of Detroit, to the Flats of Lake St. Clair, and made the survey of the location of the Canal lately constructed by the Government of the United States in the vicinity of the boundary line between the United States and Canada.

I commenced by ascertaining the position and bearings of the north westerly side of the channel, called the "South Pass," at, and a short distance on each side of the mouth.

By this means, I defined a point in the channel bank of the mouth of the "Pass," which I could readily locate on the chart issued by the Bureau of Topographical Engineers of the United States.

I then proceeded to lay down a meridian line by an observation of the North Star on its eastern elongation, which I took on the 19th inst., from the north westerly side of the Canal; and from this line, *in connection* with a base line measured along the side of the Canal, formed a series of triangles,—from which I subsequently calculated the distance and astronomical bearing of the point at the mouth of the "Pass" in relation to the several points on the sides of the Canal.

I also checked the position of the Canal by ascertaining the true bearing of a line passing over the Channel bank on the Canadian side of the "Pass" at the extreme north westerly edge of the first curve in it. And, on subsequently plotting these lines on the chart above mentioned, I found them to agree with the survey.

The topography on the tracings which accompany this report is taken from the chart just mentioned; and the direction and position of the boundary line between the United States and Canada, from a Tracing purporting to be a true copy of part of the original map defining the boundary line between the two countries, signed by Messrs. Barclay and Porter, and referred to in their report.

By reference to the accompanying Tracings, it will be seen that the International boundary line passes through a corner of the Canal at its north easterly end.

The portion of the Canal in British waters, consists of a triangular piece containing an area of 41,250 square feet, of which the easterly pier of the Canal occupies 25,000 square feet. In other words, the outermost side of the piece lies in British waters for a distance of about 750 feet, and the inner side,— a distance of 500 feet.

In arriving at these results, I have assumed, in accordance with your instructions, the International boundary line to be truely laid down on Messrs. Barclay and Potter's Map, and the topography and soundings to be correctly represented on the United States Chart furnished by you.

I have the honor to be, Sir
Your obedient servant,
FRED. L. FOSTER,
Provincial Land Surveyor.

Gilbert McMicken, Esq.,
Police Commissioner, &c., Ottawa, Ont.,

OTTAWA, 30th November, 1870.

SIR,—I have the honor to report that, in obedience to your instructions, I charged myself with the duty of engaging the services of a good and reliable surveyor to locate the new Canal now being constructed (and nearly completed) by the Government of the United States of America across the Lake St. Clair Flats, so as to define its position in respect to the International boundary line as accurately as possible.

I was fortunate in securing the services of Frederick L. Foster, Esq., of Windsor, Provincial Land Surveyor, a gentleman eminent in his profession, of irreproachable character and habits, and enjoying the confidence and esteem of all who know him.

He happened to be in Boston when I called upon him, but, responding to my telegrams returned immediately to Canada, and, agreeing to undertake the work, we proceeded without loss of time to accomplish it.

On the 16th instant I engaged a small steam yacht to convey the surveyor, myself and assistants to the Canal, and early on the 17th we left Detroit in her. After getting a few miles out into the Lake, we were obliged to return, owing to the severe storm then prevailing, and the boat proving quite unseaworthy.

We procured another small steam yacht, the *Undine*, of somewhat greater length of keel and having a better engine. In her we started anew in the course of the night, and after six hours of a stormy and somewhat dangerous passage, arrived at the Canal on the Flats on the morning of the 18th.

For what was accomplished there, to give effect to your instructions, I beg leave to refer you to the Report of the Surveyor herewith submitted.

I feel very confident that the location of the Canal, as laid down by Mr. Foster, will be found as nearly as possible correct, and defined with all the exactness the data furnished him would permit. He was most indefatigable and painstaking in his efforts to secure a satisfactory result. In prosecuting this duty we were three days and nights exposed to the inclemency of the weather, without opportunity of changing our clothes or a place to lie down in. Fortunately, on the morning of the 19th, the clouds, which during the night had obscured the Polar Star, dissipated, and Mr Foster obtained an excellent observation.

I trust what has been done will be found satisfactory, and the expense (a statement which I submit herewith) be considered in keeping with the closest economy.

I have the honor to be, Sir,
Your most obedient humble servant,
G. McMicken.

Documents submitted herewith :—
1st. Report of Surveyor F. L. Foster, Esq.
2nd. Plan shewing the position and location of the Canal,
3rd. Chart having location of Canal laid down thereon.
4th. Chart of latter date from same plate, but having the boundary line *across the Flats* omitted.

(No. 57.)

QUEBEC, September 1, 1870.

SIR,—I have the honor to forward herewith a copy of a minute of the Privy Council of the Dominion, covering a report from the Deputy Minister of Justice, with reference to the seizure, by the United States' authorities, of two barges, the property of Hiram Little.

2. The Ministers request me to bring the case, which the papers clearly set forth, under your notice, with a view to a representation being made thereon to the Government of the United States.

I have, &c.,
(Signed,) JOHN YOUNG.

Sir E. Thornton,
&c., &c.

(Copy—No. 43.)

WASHINGTON, September 12th, 1870.

SIR,—With reference to Your Excellency's despatches, Nos. 57 and 58, of the 1st instant, in which you convey to me the wish of the Government of the Dominion, that I should make a representation to the United States Government relative to the arrest of Mr. Hiram Little, and the seizure of two barges belonging to him by United States' authorities, I have the honor, after due reflection, to submit to Your Excellency that it may be more prudent to defer making any communication upon the subject until it be clearly proved, by reference to the maps which must exist in England, that the point where the seizure was effected is really within British jurisdiction.

As I understand from Your Excellency that a statement of the case has been forwarded to Her Majesty's Secretary of State for the Colonies, an examination of the maps will no doubt be at once made, and very little delay will arise from awaiting the results, when I should be able to speak more authoritatively as to the proceedings of the United States' authorities.

I have, &c.,
(Signed,) EDWARD THORNTON.

His Excellency,
The Right Honorable
Sir John Young, Bart., G.C.B.,
&c., &c., &c.

(No. 217.)

QUEBEC, September 23rd, 1870.

MY LORD,—I have the honor to enclose a minute of Council, which adopts a report dated the 26th August last, from the Deputy of the Minister of Justice, "On an appli-

30th August, 1870. "cation on behalf of Hiram Little, respecting the seizure of two vessels "belonging to him, and his own arrest at Detroit by the United States' "authorities, for an alleged attempt to evade the Revenue laws of that country, and they "respectfully advise that the recommendations contained in the said annexed report be "approved and adopted."

No.51, Sep. 1. " 58, " 1. " 43, " 12. I duly forwarded the minute and report to Sir E. Thornton, and endorse copies of my communications to him, and of the despatch which I received from him in reply.

I quite concur with Sir Edward that it is desirable that the properly authenticated maps should be examined before any formal application is pressed upon the United States Government, so as to be on pertectly sure ground.

I may, however, observe that though several newspapers in the United States have commented upon these proceedings, not one of them suggests a doubt as to the canals being within the limits of Canada.

I am also informed that, in times past, some amount of Canadian money has been expended on this very passage.

No intention exists of taking any advantage in the premises, or appropriating the works as Canadian property.

On the contrary, every right acquired in the improvement will be respected, and it is in contemplation to afford pecuniary assistance towards its completion.

I have, &c.,
(Signed,) JOHN YOUNG.

The Earl of Kimberley.

(Copy—No. 254.)

OTTAWA, October 29th, 1870.

MY LORD,—With reference to my despatch, No. 217. of 23rd September, I have the honor to enclose copy of a despatch which I have received from Her Majesty's Minister at Washington, covering copy of a despatch which he had addressed to the Secretary of State for Foreign Affairs, on the subject of the Canal which has been recently constructed by direction of the Government of the United States, across the St. Clair Flats.

I have &c.,
(Signed,) JOHN YOUNG.

The Earl of Kimberly, &c., &c., &c.

(Copy—No. 287.)

The Secretary of State for the Colonies to the Governor General.

DOWNING STREET,
4th November, 1870.

MY LORD,—With reference to your despatch, No. 217, of the 23rd of September, respecting the case of Mr. Hiram Little, I have the honor to inform you that I have requested the Secretary of State for Foreign Affairs to give directions for the supply for the use of your Government of copies of the official maps shewing the boundary between Canada and the United States, on the St. Clair Lake and River.

These maps form only a small portion of the series accompanying the declaration of the Commissioners appointed under the 6th Article of the Treaty of Ghent.

If the Canadian Government is desirous of receiving copies of the entire series, which are very bulky, I shall be happy to give directions for their preparation. I request that

you will inform me if this is the case, and whether the Canadian Government are prepared to bear the expense of the copying, which will be entrusted to the Topographical Department of the War Office.

I have &c.,
(Signed,) KIMBERLEY.

Governor General, The Right Honorable,
The Lord Lisgar. &c., &c.

(Copy—No. 265.)

OTTAWA, 16th November, 1870.

MY LORD,—I have the honor to transmit an approved Minute of the Privy Council of the Dominion, which requests me to apply to your Lordships for duly authenticated copies of all maps, plans, and reports by the Commissinners who were appointed to determine the boundary line between the United States and Canada.

14th November, 1870.

I have &c.,
(Signed,) LISGAR.

The Earl of Kimberley, &c. &c.

(Copy—No. 309.)

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 14th November, 1870.

On a Memorandum, dated 10th November, 1870, from the Honorable the President of the Privy Council, submitting that in order to enable the Government of Canada to deal more readily with questions connected with the boundary between the United States and Canada, and to meet points of International law, which may occasionally arise, as well as to place the Government in possession of authentic records which might, if necessary, be used and recognised in Courts of Justice, Your Excellency will be pleased to apply to the Right Honorable Her Majesty's Secretary of State for the Colonies, for duly authenticated copies of all maps, plans, and reports by the Commissioners by whom the said boundary line between the United States and Canada was established.

The Commissioners submit the foregoing recommendation for Your Excellency's approval.

Certified.

WILLIAM H. LEE,
Clerk Privy Council.

(No. 354.)

DOWNING STREET,
14th February, 1871.

MY LORD,—With reference to your despatches of the Nos. and dates noted in the margin respecting the case of Mr. Hiram Little, I have to inform you that copies of the charts of the Lake and River St. Clair, which are being prepared in the Department of Works, will be ready in about a fortnight.

No. 217, Sept. 23, 1870; No. 254, Oct. 29.

I have, &c.,
(Signed,) KIMBERLEY.

Governor General,
The Right Honorable,
The Lord Lisgar, G.C.B.,
&c., &c., &c.

(No. 43.)

QUEBEC, February 16th, 1871.

MY LORD,—With reference to previous communication on the same snbject, I have the honor to forward herewith a copy of a minute of the Privy Council, covering a "Report of Capt. Cameron, R.A., marked confidential, "upon the question of the true location of the International Boundary "between the United States and Canada, from the Detroit River to River "St. Clair, through Lake St Clair." Feb. 14, 1871. Lord Lisgar, No. 217, Sept. 27, 1870; No. 254, Oct. 29, 1870.

2. The conclusion to which the Council have arrived, is that "with a "view to preventing difficulties in future, it is desirable that the boundary "at St. Clair Flats should be marked on the spot, and the Committee of "Council recommend that the mixed Commission about to be appointed to "mark the International Boundary between the Lake of the Woods and the Rocky Moun-"tains, should be also charged with the duty of locating and marking the boundary "designated by the Commissioners under the 6th Article of the Treaty of Ghent." Colonial Office No. 287, Nov. 4, 1870.

3. In accordance with the recommendation contained in the last paragraph of the minute, I shall duly forward a copy thereof to Her Majesty's Minister at Washington.

I have, &c.,
(Signed,) LISGAR.

To the Earl of Kimberley.

(Confidential.)

Remarks upon the true location of the International Boundary Line at the mouth of the River St. Clair, with reference to the so-called American Canal.

Attention has been directed to this question in consequence of the seizure, by Custom officials of the United States, of the steam barge *Reindeer* and the wood barge *Campbell*, on Lake St. Clair Flats, on the 27th of last June, for landing cord-wood at a pier on the western side of a canal then being constructed through those flats.

The object of the following remarks is to shew that the Canal, as laid down on a plan, dated 22nd November, 1870, by Mr. F. L. Foster, Provincial Land Surveyor, of Windsor, Canada, and described thereon as "American Canal made by United States Government," is wholly within Canadian territory. Copy of Plan annexed thereto.

The arguments are:

1. The boundary line through Lake St. Clair, as laid down on a map accompanying Commissioners Barclay and Porter's Report, under the 6th Article of the Treaty of Ghent, 1814, is not receivable as evidence of the position of the boundary. Tracing of the Commissioners' Map annexed hereto.

2. The Report of the Commissioners describes a boundary line which runs over one and three-quarter miles to the westward of the Canal; and the position thus described is that of the "true boundary."

3. But if the description given in the Commissioners' Report be held to support the accuracy of their map, then, their decision being contrary to the intent of the Treaty of 1783, is subject to reconsideration, for the Commissioners were only authorized to act "in conformity with the true intent of said Treaty." See Treaty of Ghent.

Where it has been considered proper to draw particular attention to certain passages, these have been *italicised*.

Marginal references are given to indicate the authorities from which quotations have been made, and, with the exception of Mr. McMicken's Report, the authorities may be found in the Parliamentary Library.

The boundary line, as laid down on the maps accompanying Messrs. Barclay and Porter's Report, was intended to serve merely as a general illustration of the text of their decision, and has no legal force to *limit or define* the written description of the boundary as given in the report,—for the following reasons:—

1st. The contracting parties did not agree to be bound by maps.

Messrs. Barclay and Porter were appointed, under the 6th Article of the Treaty of Peace between Great Britain and the United States, signed at Ghent, 24th Decemer, 1814, "*to designate*" the boundary now in dispute "*by a report or declaration*" under their hands and seals, and "*to decide*" to which of the parties several islands belonged. "And" in the words of the Treaty, "both parties *agree to consider such designation* and decision *as final and conclusive.*" Hertslets collection of Treaties, Vol. II, p. 383.

2nd. The contracting parties, by the Treaty of Ghent, specially excluded the use of map records as a means of binding themselves.

Four of the Articles of the Treaty—the 4th, 5th, 6th and 7th,—have reference to parts of the international boundary. Idem.

By the 4th Article, the contracting parties lay down that the Commissioners shall "*by a declaration of report,*" under their hands and seals, *decide,* &c., and both parties shall consider *such decision* as final and conclusive." Idem, p. 380.

The 5th Article, after describing the purposes for which the Commissioners are to be appointed under its authority, lays down that they shall "be appointed, sworn and authorized to act exactly in the manner directed "with respect to those mentioned in the next preceding Article, unless "otherwise specified in the present Article." The Article then *specifies* that "The said Commissioners shall cause the boundary aforesaid," &c., "to be surveyed "and marked," &c., "according to the said provisions" of the Treaty of 1783, and the "said Commissioners shall make a *map* of the said boundary, and annex to it a *declara-*"*tion* under their hands and seals, certifying it to be a true map of the said boundary, "and particularizing the latitude and longitude of the North-west angle of Nova Scotia, "of the North westernmost head of Connecticut River, and of such other points of the "said boundary as they may deem proper. And both parties agree to consider such *map* "*and declaration* as finally and conclusively fixing the said boundary." Idem, p. 382.

The 6th article—that bearing specially on the subject in hand,—after describing certain doubts which had arisen with regard to the boundary as described in the Treaty of 1783, and repeating the injunction that the two Commissioners to be appointed, "shall be appointed, sworn and authorized to act exactly in "the manner directed with respect to those mentioned in the next preceding "article, *unless otherwise specified in this present article,*" *specifies* that "the "said Commissioners shall, *by a report or declaration,* under their hands and seals, *desig-*"*nate the boundary* through the said river, lakes, and water communications, and decide "to which of the two contracting parties the several islands lying within the said river, "lakes, and water communications, do respectively belong, in conformity with the true "intent of the said Treaty of 1783, and both parties agree to consider *such designation* "and decision as final and conclusive." Idem, p. 383.

The 7th Article authorizes the Commissioners, appointed under the 6th Article, upon their oaths, "to fix and determine" the continuation of the boundary line to the most north-western point of the Lake of the Woods, and "to decide" to whom the several islands lying along the boundary belong, and "to cause such parts of the said boundary as require it, to be surveyed "and marked;" and the Article then lays down that "the said Commissioners shall *by* "*a report or declaration,* under their hands and seals, *designate* the boundary aforesaid, "*state their decision* upon the points thus referred to them, and particularize "the latitude and longitude of the most north-western point of the Lake of "the Woods, and of such other parts of the said boundary as they may "deem proper. And both parties agree to consider *such designation and* "*decision* as final and conclusive." Idem, p. 384. Hertslet's collection of Treaties. Vol. II, p. 384.

From the foregoing, it appears that the exact manner in which the Commissioners were required to record their decisions, was particularly specified for each of the four cases,—and the contracting parties bound themselves to consider as final, only the decisions recorded in the manner specified.

Now, in the 6th Article, which authorizes the appointment of Commissioners to decide upon the boundary passing through Lake St. Clair, *no mention is made of a map in the specification of the manner in which the Commissioners were to record their decision*; and, inasmuch as the manner in which the Commissioners were required to record their opinion was specified without reference to a map, the injunction that they should be authorized "to act exactly in the manner directed in the next preceding "Article, *unless otherwise specified in this present Article*," pointedly excludes maps which were required from Commissioners acting under the 5th Article. Idem, p. 383.

The correctness of this view is further shewn by a comparison of the terms in which the contracting parties agree to abide by the Commissioners' decisions :—

In the 5th Article "both parties agree to consider *such map and declara-* "*tion* as finally and conclusively fixing the said boundary." Idem, p. 382.

But in the 6th Article "both parties agree to consider *such designation* "*and decision* as final and conclusive." Idem, p. 333.

Nor is there any room for doubt as to the meaning intended by the expression to designate "by a *report or declaration*," since in the "American Project of a Treaty as returned by the British to the American Plenipotentiaries,' it will be seen that the expresssion came particularly under the consideration of the negotiating parties, and was applied by them to the case of the 4th Article, which, from its very nature, required no map. And again, in the Convention between Great Britain and the United States of America, relative to the reference to arbitration of the disputed points respecting the boundary line, under the 5th Article of the Treaty of Ghent, signed at London, September 29, 1827, the following sentences will be found in close proximity to one another :— State Papers, 1821-1822. Vol. IX., p. 536, et seq. Idem—1826-1827. Vol. XIV., p. 1004.

"*No maps, surveys or topographical* evidence of any description shall be "adduced by either party beyond that which is hereinafter stipulated." Idem, p. 1001.

"Each party shall have full power to incorporate in, or annex to, either its first or "second statement, any portion *of the Reports* of the Commissioners, or papers thereunto "annexed and *other written documents* laid before the Commission," &c.

The exceptions mentioned in the first septence as adducible, are "the map called, Mitchell's Map" and "The Map A."

The word "Maps" in the above extract is clearly used in antithesis to "Reports" and "other written Documents."

3rd. The Commissioners did not annex to their maps a declaration, under their hands and seals, certifying the maps to be *true ones of the boundary line.*

Should it be contended, notwithstanding what has been said above, that the maps constitute more than a mere illustration of the Commissioners *designation and decision*, and that they form part of these in the same spirit that a map, under the 5th Article, was constituted a part of the Commissioners decision in that case; still, it is to be observed that the maps delivered with the decision under the 6th Article, are of no legal effect, for the Commissioners failed to comply with the condition of the 5th Article which required them "to annex to the map, a declaration under their hands "and seals, certifying it to be *the true map of the said boundary.*" Hertslet's collection of Treaties. Vol. II., p. 382.

The Commissioners in their Report, signed at Utica on the 18th of June, 1822, refer to the boundary merely as being "more clearly indicated by a "black line on a series of maps accompanying this Report."—While on the face of the maps, they are merely "*identified* by certificate, subscribed by "the Commissioners, and by the two principal surveyors employed by them." State Papers 1821-1822. Vol IX., p. 791. Idem, p. 792.

4th. The Commissioners themselves did not contemplate that the maps delivered by them would be made use of to limit the description of the boundary given in their *Report or Declaration.*

In the preamble of the declaration of the Commissioners, they state their duty to be to "*designate the boundary by a Report or Declaration*, and to decide to "which of the two contracting parties, the several islands, lying within the "said rivers, lakes, and water-communications do belong, in conformity with the true "intent of the Treaty of 1783."

Idem, p. 791.

Now, in the Report of the Commissioners, there are five distinct cases of reference to maps accompanying their Report:

Idem. p. 792.

a. As an assistance in tracing "the following described line" which line, as described in writing, the Commissioners declare to be "the true "Boundary intended" by the Treaties of 1783, and of Ghent, 1814.

Idem.

b. As "Exhibiting correct surveys and delineations of all rivers, "lakes, water-communications, and Islands embraced by the 6th Article of "the Treaty of Ghent."

Idem.

c. As being "*identified* by a certificate, subscribed by the Commis-"sioners, and by the two principal surveyors employed by them."

Idem, pp. 792-3-4.

d. As a means, by reference to *letters* and numerals, to distinguish certain islands of which the names were not given; and to distinguish some of a group of islands, from others of the same group, have but one name applicable to all.

Idem, p. 794.

e. And, as shewing "a line (drawn on the map with black ink, and "shaded on one side of the point of intersection with blue, and on the other "side with red) passing across the river at the head of St. Joseph's Islands, and at the "foot of the Neebish Rapids, which line denotes the termination of the boundary" under the 6th Article of the Treaty of Ghent.

But in no case will there be found any reference to a map, which will justify a belief that the Commissioners themselves regarded those they furnished, in any other light than as an assistance to a clearer understanding of their Report, more particularly with reference to the position of nameless islands, which could most easily be identified by an illustrative map.

This view is fully confirmed by the fact that the 1st, 2nd, 3rd and 5th cases of reference are introduced merely parenthetically, while the character of the 4th case of reference clearly accounts for the greater importance given to *it* by the omission of parenthesis.

State Papers, 1821-1822, Vol. IX, p. 192.

Idem, p. 792.

In the former cases, the sense is clear, definite, and complete, without the parenthetical reference to maps; but in the 4th case, until the letters and numerals are associated with the islands to which allusion is made—the sense, although clear and complete, is undetermined; and the reference was, therefore, properly made without parenthesis. Yet in this case, the map cannot be considered as limiting the sense of the Report;—for, in spirit and in fact, the designation of an island by an arbitrarily chosen numeral, has exactly and only the same force as its designation by a name. The only difference between the cases,—and one arising out of their nature, is that names were already associated with the islands to which they referred, while a means,—in this instance maps,—had to be adopted for associating the numerals with the nameless islands to which *they* referred: but this association once established, the authority of the map ceases with regard to the boundary line, for the Commissioners "do decide and declare that the following described line is the true boundary," and in that description no reference is made to maps, except for the purpose just above detailed.

Idem, p. 792 and 794.

5th. The location of the boundary line on the Commissioner's maps of Lake St. Clair, between Detroit River and River St. Clair, does not agree with the definition of that part of the line as described in the Commissioner's Report, which is declared to be the "true line."

The objects for appointing Commissioners are thus stated in the 6th Article of the Treaty of Ghent;—

"Whereas by the former Treaty of Peace, that portion of the bour-
" dary," &c,—" was declared to be along the *middle* of the said river into Hertslet's Collection of Papers Vol.
" Lake Ontario, through the *middle* of said Lake until it strikes the com- II, p. 383.
" munication by water between that Lake and Lake Erie, thence along the
" *middle* of said communication into Lake Erie, through the *middle* of said Idem.
" Lake, until it arrives at the water communication between that Lake and
" Lake Superior. And whereas doubts have arisen what was the *middle* of said river,
" lakes, and water communications, and whether certain islands lying in the same," &c.
" In order, therefore, finally to decide *these doubts*, they shall be referred to two Com-
" missioners," &c.

One of the duties of the Commissioners was, therefore, particularly to remove doubts arising from the use of the word *middle* in the Treaty of 1783.

In laying down the line from Detroit River to River St. Clair, the Commissioners decided that, from the middle of the River above Great Turkey Island, it
should pass by the northwest of, and near to the Island "called Isle à la State Papers.
" Péche, to Lake St. Clair; thence, through the middle of said Lake, *in a* 1821-1822, Vol.
" *direction to enter that mouth or channel* of the River St. Clair which is IX, p. 794.
" usually denominated The Old Ship Channel; *thence, along the middle of said*
" *channel*, between Squirrel Island on the south-east, and Herson's Island on the north-
" west, to the upper end &c.: Thence—"

Now, after the description of the course of the line through the upper part of Detroit River by the North-west of Isle à la Péche to Lake St. Clair, the
sentence, " thence, through the middle of said Lake, in a direction to enter State Papers,, 1821-1822, Vol.
" that mouth or channel of the River St. Clair usually denominated the Old IX, p. 794.
" Ship Channel," evidently means that the line should be drawn from near
the North-west point of Isle à la Pêche along the most direct navigable course, in this case directly to the entrance, wherever that entrance may be, of the Old Ship Channel. To read the sentence as implying an irregular or curved line stretching out into Lake St. Clair in an indefinate medial direction, is to suppose that the Commissioners had been inattentive to one of the only two kinds of doubts which they had to remove, viz., the meaning of the word "middle," and the sovereignty over the islands along the boundary. But, such a supposition is quite untenable, for immediately after using the words " through the middle of said Lake " the Commissioners accurately defined the course as " in a direction to enter that mouth or channel," &c.

Any irregular figure, such as that presented by Lake St. Clair, has a middle point; and a line might be drawn from any other point, such as the North-west angle of Isle à la Pêche, through it in a direction ultimately to reach any third point, such as the entrance to the Old Ship Channel. But, again, to suppose that the Commissioners intended to convey this meaning, is to avoid a plain and simple construction, and to accept a rendering at once questionable, and laying them open to a charge of neglect. Moreover,
the line, as indicated on the map, does not pass through the middle point of Idem.
the Lake St. Clair; nor is it drawn, from its entrance into the lake, " in a
" direction to enter that mouth or channel of the River St. Clair which is usually
denominated the Old Ship Channel."

The *channel* of a river is plainly not the river itself, but the deeper part or hollow in which the principal current flows; and, it may, or may not, be marked by banks shewing above the surface: and the channel of a river usually runs out for some distance beyond the visible banks.

As if purposely to guard against any other than the common acceptation of the word " channel " just given, the Commissioners introduced the alternative term " mouth,"—which lucidly conveys the meaning that the channel is to be entered where it begins.

Again, in describing the course of the line passing from Lake Erie up Detroit River, the Commissioners say:—" Thence " (that is, from the south of the Middle Sisters) " to the middle of Detroit River, in a direction to enter the channel which divides Bois blanc and Sugar Islands; thence up the said channel to the west of Bois-blanc Island, and to

the east of Sugar, Fox, and Stony Islands, until it approaches," &c. But the islands,—Bois-blanc and Sugar, by which the particular channel meant is indicated,—are not at the mouth of Detroit River: they are at some distance up the stream. Yet it is clear that the word *channel* here implies that the deeper part or navigable course is to be followed from the mouth of the river up to the passage between the islands. Similarly the words "in a direction to enter that mouth or channel of the River St. Clair usually denominated The Old Ship Channel; thence along the middle of said channel, between Squirrel Island on the south-east and Herson's Island on the north-west" &c., must be understood as implying that the course of the Old Ship Channel *up* to Squirrel and Herson's Islands is to be followed.

The following "Sailing Directions for Lake St. Clair, to enter St. Clair "River by the South Pass or Channel," extracted from "The Coast Pilot, "compiled by Thomas S. Thompson, Licensed Pilot for the Lakes—5th "Edition—published at Detroit 1869," will serve to show where the entrance to the South Pass, or Old Ship Channel, of the River St. Clair really is; and also, will furnish an example of the common acceptation of the phrase "to enter by a channel."

Thompson's Coast Pilot, 1869, p. 89.

"*To enter the St. Clair River by the South Pass or Channel*, run out "of Detroit River E. N. E. until the two first points north of the Light- "house are open; then, N. E, ½ N. 20 miles, till you make the South "Pass Lighthouse, *when in 15 feet water*, bring the Lighthouse and Beacon Light in "range, steer up on this range, passing black buoys to port, and red buoys to starboard, "till up to beacon light; thence, haul off to S. E. and leave red buoys to starboard and "black to port, until into the river." (See foot note.)

Idem.

"There are range lights kept on the starboard hand, opposite the turning point into "the river, and are thus: red and white for each bend or reach, first from the beacon "light to abreast the point, and then up the river and *vice versâ*."

Besides the above evidence as to the position and course of the Old Ship Channel, charts and oral evidence in confirmation are referred to in Mr. McMicken's Report on this subject.

Report by G. McMicken Esq., d.l-8-70 to H. Bernard Esq., Deputy of the Minister of Justice, Ottawa. An Original copy of the chart is in the possession of the Deputy Minister of Marine.

The course above described is approximately laid down on the accompanying tracing from a United States Government Chart; also the boundary line transferred from the Commissioners Messrs. Barclay and Porter's Map.

It is, therefore, evident that the boundary line, as shown on the Commissioners' map, agrees neither in its departure from Detroit River, its course across the lake, nor at its arrival at the Old Ship Channel, with their description of "the true boundary intended" by the Treaties of 1783 and 1814.

And for the various reasons enumerated, the Commissioners' map has no legal force to limit or define their written description of the boundary.

This conclusion suggests the following questions, and calls for explanation:—

Why did the Commissioners furnish maps with their Report?

And since they did furnish maps, and indicated the course of the boundary line upon them, what reason is there for supposing that the line so laid down was not intended as an exact representation of the description in their Report?

The 8th Article of the Treaty of Ghent supplies a full answer to the first of these questions. The Article directs that,—

"The several boards of two Commissioners mentioned in the four preceding articles, "shall respectively have power to appoint a secretary, and to *employ* such *surveyors* or "other persons as they shall judge necessary. Duplicates of all their respective reports, "declarations, statements and decisions, and of their accounts, and of the journal of their "proceedings, shall be delivered by them to the agents of His Britannic Majesty, and to

NOTE—What is here called "*the River*" is the channel confined between visible banks. See also the Sailing directions on the United States Government Chart.

"the agents of the United States, who may be respectively appointed and authorized to "manage the business on behalf of their respective Governments."

In reply to the second question, besides the reference made to the subject in the preceding pages, it is further to be observed, that on the "exact tracing" of that portion of the Commissioners' Map (furnished by His Excellency the Governor General) including the entrance to the River St. Clair, there is no reference to subaqueous topography,—and it is therefore assumed that no such reference will be found affecting the course of the boundary line, or any of the series of maps furnished by the Commissioners.

Now, as the Commissioners did not note on their maps, either soundings or the windings of subaqueous channels, it *was not to have* been expected that a line,—intended by them merely to afford a general illustration of their Report, and on so small a scale that such minute details as those here referred to would have been practically useless,—should have been drawn so as to shew the narrow and irregular entrance through the shoals at the mouth of the Old Ship Channel, since the "written description in a direction to enter that mouth or channel," sufficiently explained its course.

It is presumed, too, that the doubts with reference to the term "middle," and to the sovereignty over certain islands which the Commissioners had to remove, where not connected with uncertainty as to whether the line should be drawn so as to interfere or not with navigation ;—but, *assuming the right of navigation as inalienable*, the doubts were with respect to the term "middle" *as affecting the sovereignty over certain islands.*

In the "former Treaty of Peace"—that of 1783,—the boundary was described as running along the middle of a river, water-communications, and lakes, without reference to islands ; "and," in the words of the 6th Article of the Treaty of Ghent "whereas doubts "have arisen what was the middle of said river, lakes and water-communications, and "whether certain islands lying in the same were within the Dominion of His Britannic "Majesty or of the United States : In order therefore finally to decide these doubts," &c.

The quotation made from Mr. Clay's letter to Mr. Gallatin, the United States Minister Plenipotentiary at the British Court, shews that it was taken for granted that the boundary line was to be so drawn as not to interfere with the right of either of the nations occupying the opposite banks to the navigation throughout the *co-terminous* navigable boundary.

Again, the 1st Article of the Treaty of Ghent provides for the general restoration of captured territory : but, in the 8th Article there is a provision, applicable to the islands referred to in the 6th Article, which contemplates the transference of some of these—indubitably the property of one nation, to the other nation.

The application of this provision to the islands referred to in the 6th Article, is only explicable on the supposition that it was assumed the course of the boundary line was not to be decided merely with a view to determine the sovereignty over these islands ; but, that this consideration was to be subordinated to another—the "reciprocal advantages and mutual convenience" of the Treaty of 1873—involving the necessity for drawing the line so as not to interrupt navigation for either country, and the omission, from the Commissioners' maps, of all notes of soundings and delineation of channels, is plainly consistent with the foregoing view.

Moreover, it was to be expected that had the Commissioners to define the exact position of the boundary line on maps, whether such delineation was to be binding on the contracting parties, or not,—the wording of the 6th Article of the Treaty would have conformed with that in the 5th and 7th Articles.

Under the former of these : "the Commissioners shall cause the boundary aforesaid "to be *surveyed and marked*," and under the 7th Article the Commissioners are directed "to cause such parts of the said boundary as require it to be *surveyed and marked.*"

But the 6th Article makes no reference to a survey.

The Commissioners then furnished maps in compliance with the 8th Article of the Treaty of Ghent, but not being required to mark the boundary *in situ*, nor to furnish delineations of subaqueous topography (which would have involved an enormous and unnecessary addition to their labor), they depicted the line as passing from visible to

visible landmark, in a manner to generally illustrate their written description, which defined a navigable course, and thus may be accounted for—the indefinite medial direction given on the maps to the line when passing through large sheets of navigable water.*

Assuming, then, that the map can be regarded only in the light of an illustration, except in so far as it associates certain letters and numerals with the islands to which these refer,—it remains to be decided where the line, described by the Commissioners as *the true one*, is ; for they were not, as in other cases, required to mark it *in situ*.

Now, short of mathematical technical terms, it is conceived that no language can be clearer than that which the Commissioners themselves have used in describing the disputed portion of the boundary. In common terms, they have defined two points, and directed that the line should be drawn from one of these to the other.

But,—since the map illustration indicates an irregular line, while the simplest construction to be attributed to the written description, implies a straight line,—the question naturally occurs :—Could there have been any reason to induce the Commissioners to project the line irregularly ?

If the whole boundary described by their report be followed throughout its course, it will be strikingly manifest that the Commissioners' decision was determined with a view to uninterrupted navigable communication being available to each of the contracting parties; and that, while this object was never neglected at any point throughout the line, the only deviations in degree, were made with a view to an equitable apportionment of island property. The latter consideration, however, was in no case allowed by them to supersede the former.

During negotiations between the United States and the British Government with reference to the right, claimed by the former, of navigating the Lower St. Lawrence —Mr. Clay in a letter (dated, Department of State, Washington 19th June, 1826), to Mr. Gallatin, refers to the Great Lakes, and says, "they are entirely enclosed within the "Territories of the United States and Great Britain, *and the right to their navigation,* "*common to both, is guaranteed by the faith of Treaties, and rests upon* "*the still higher authority of the law of nature.* The Great Lakes are united "by but one natural outlet to the Ocean, the navigation of which (Ocean) "is common to all mankind. *That outlet, along a considerable part of its course, forms a* "*common boundary between the Territories of the United States and Great Britain and* "*to that extent the right of navigating it is enjoyed by both.* The United "States contend that they are invested with a right to pass from *those lakes,* "*the incontested privilege of navigating which they exercise,* through that "natural outlet to the Ocean," &c.

State Papers, 1831-1832, Vol. XIX., p. 1089.

State Papers, 1831-32, Vol. IX., p. 1089.

From this extract it is clear that the United States' Government held the same view as the Report of the Commissioners indicates was held by *them*, with regard to the right of each of the contracting parties to retain uninterrupted navigable communication along the boundary the Commissioners had to define. Moreover, four years after the decision of the Commissioners, under the 6th Article of the Treaty of Ghent, had been delivered, the United States' Government are seen, in the foregoing quotation, to have declared that the right of navigation at the now disputed point—for it is included in the "common boundary" to which reference was made,—besides resting on the supreme law of nature *was also guaranteed to both parties, by faith of Treaties.*

But such guarantees could not have existed if the boundary was run as it is marked on the map of Lake St. Clair, which accompanies the Commissioners report,—for there was no navigable channel to the South or eastward of the Old Ship Channel leading out of Lake St. Clair into River St. Clair. On the other hand, there *is* another navigable, but circuitous channel in American water—the new Ship Channel,—to the north-west of the Old Ship Channel.

In 1854, a Bill passed both Houses of Congress, appropriating a large sum for the

* It will be observed that the United States Bureau of Topographical Engineers' Charts of the lakes omit the boundary line when it enters the lakes.

improvement of the natural entrance to the Old Ship Channel. The President vetoed the Bill. Then the Secretary of the Buffalo Board of Trade wrote, on the 10th April, 1855, to the Provincial Secretary of Canada, asking aid from the Canadian Government, and saying, that on the Board attempting themselves to carry the object of the Bill into effect, "*it was ascertained that the Channel was in Canadian water, and the project* "*was therefore abandoned.*" Canada made the required grant, and the United States' Government afterwards appropriated some funds for the same work.

Again, it may be asked: Why did the Commissioners select the Old Ship Channel as the course of the boundary? A more direct line might have been drawn from Detroit River to River St. Clair than that indicated on their map,—and this, too, supposing their object to have been to give Squirrel Island to one of the parties, and to assign Herson's Island to the other. Nor, to accomplish this, was it necessary to cross dry land, for there are several other courses,—at least three, to the eastward of the boundary line, and all more direct, which would have satisfied the condition of mere water-communication, if that were all that was required by the Treaty of 1783. The only explanation,—and it is a very simple one, and quite consistent with the principle which manifestly actuated the Commissioners throughout the performance of their duty,—is that the Old Ship Channel afforded the most direct *navigable* communication between Lake St. Clair and Lake Huron.

A reference to charts, or to the "Sailing Directions" already quoted, will show that no interruption to navigation occurs between the north-west point of Isle à la Pêche, or near thereto, and the entrance to the Old Ship Channel *by its mouth*;—while, on the other hand, the lighthouses, beacons, and irregular course indicated in the former, and the soundings noted on the latter, prove the existence of unnavigable shoal water between Isle à la Pêche and the point where the existence of the navigable channel is first marked by banks shewing above the surface of the water.

Foster's Maps, Copy attached thereto.

Now the so-called American Canal strikes into the Old Ship Channel quite close to the point just mentioned, and is cut through the shoals referred to, nearly parallel to, and a little to the westward, or American side of the boundary line indicated on the Commissioners' map; while the mouth of the channel, or its true connecting point with Lake St. Clair basin, is more than a mile and three-quarters to the westward of the American Canal.

State Papers, Vol. IX., p. 798.

It is to be observed, too, that whether the straight line implied by the words "*in a* "*direction* to enter that mouth or channel of the River St. Clair usually "denominated the Old Ship Channel"—whether such a straight line, from near Isle à la Pêche, be drawn to the true entrance to the Old Ship Channel, or to intersect it over one and three-quarter miles up its course, and be considered the "true boundary line intended," in either of those cases the Canal will be within Canadian

Idem, pp. 791 and 792.

jurisdiction,—in the first, wholly so; in the second, all but the upper portion of its western side.

On the other hand, if it be held that the Commissioners' Report supports the view that the Canal is in American water, it follows that before 1842* Canada had no navigable communication between Lake St. Clair and Lake Huron, and the question is immediately raised—Did the Commissioners comply with the true intent of the Treaty of 1783, which,

Chalmer's collection of Treaties, 1604-1983. Vol. II., p. 528.

in its preamble declares that intent to have been "to establish such a beneficial and satisfactory intercourse between the two countries, *upon the* "*grounds of reciprocal advantages and mutual convenience*, as may promote "and secure to both perpetual peace and harmony?"

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*By Article VII, of the Ashburton Treaty, 1842, all the channels and passages between the River and Lake St. Clair were declared "equally free and open to the ships, vessels and boats of both parties."—State Papers, vol. 30, 1841-42, p. 365.

NOTE.—But it may be observed that a probable effect of diverting the stream of the Old Ship Channel will be to throw a bar across the Channel just to the westward of the point where the Canal enters it,—and thus to close against Canada the passage which, up to the present time, has been used in common by the two nations.

And a precedent for raising such a point may be found in the "Protest of the "American Minister at the Court of the Hague, against the decision of the "King of the Netherlands, upon the disputed points of boundary, under the "5th Article of the Treaty of Ghent, of 1814, between Great Britain and "the United States—dated 12th January, 1831," which resulted in that "decision being cancelled. The point of the Minister's protest was that the King's decision did not comply with the requirements of the Treaty of 1783.

State Papers, 1831-32, Vol. XIX, p. 1432.

Idem, p. 244.

It has been shewn, then, that for many reasons, detailed above, the maps accompanying the Commissioners' Report, under the 6th Article of the Treaty of Ghent, cannot be accepted as part of their decision.

On the other hand the written Report describes the *true* boundary, and is binding.

The course described strikingly proves that the Commissioners were guided in their decision by an intention to confirm to each of the contracting parties a right of navigation along the water-communications between the eastern and western parts of their Territories. The American Government held that such a right was their's by nature; and, moreover, four years after the publication of the Commissioners' decision touching the boundary through Lake St. Clair they declared that the enjoyment of this right was further assured to both nations on the faith of Treaties. The existence of such a right can alone account for the transference of islands indisputably the property of one nation to the other as contemplated by the 8th Article of the Treaty of Ghent. And the Commissioners having to decide in conformity with the *true intent* of the Treaty of 1783, could could not have neglected this consideration.

But they did not neglect it; for it is only by a strained interpretation of the words of their written description that the course of the boundary line can be so drawn as to interfere with natural navigation. And the strained interpretation rests upon a mistaken view regarding the maps furnished by the Commissioners.

No subaqueous topography is shewn on these maps; and it could not have been expected that on maps shewing a line only with reference to visible landmarks, the Commissioners would delineate that line conforming as to the windings of hidden channels, for, not being required to mark the line *in situ*, they would not have undertaken the unnecessary and laborious task of recording soundings.

Under these circumstances the general medial direction of the boundary line, as delineated on crossing large sheets of water is perfectly consistent with the most familiar and most literal interpretation of the Commissioners description of the *true line* as regards Lake St. Clair.

But such an interpretation involves a line of about two miles to the westward of that assumed by the constructors of the so-called "American Canal," and brings the Canal entirely within Canadian jurisdiction.

Ottawa,
26th December, 1870.

D. A. Cameron,
Capt. Royal Artillery.

The Committee of Council to whom was referred the Report of Captain Cameron, R. A., upon the question of the true location of the International boundary between the United States and Canada, from Detroit River to River St. Clair through Lake St. Clair, have the honor to report as follows:—

On the 27th of last June, the steam barge *Reindeer* and wood barge *Campbell*, with their cargoes, were seized on Lake St. Clair, by Customs' officials of the United States, on a charge of infringing the United States' Revenue laws.

The barges belonged to Mr. Hiram Little, of Wallaceburgh, Ontario, and were employed under a Canadian contractor, in supplying cord-wood for the construction, by the United States' Government, of a Canal across St. Clair Flats, at the mouth of the River St. Clair.

The wood was shipped at Sydenham River, County of Kent, Province of Ontario,—conveyed thence direct to the Canal, and there unloaded; and there, also, the vessels and cargo were seized.

Mr. Little—to obtain the release of his barges,—was obliged to enter into bonds for $3,000, subject to adjudication by the United States' Courts; but believing that the seizure was effected in Canadian territory, he forwarded an application to the Dominion Government seeking their intervention.

On the case thus coming to the knowledge of the Government, they caused a survey of the Canal to be made, and on carefully comparing its ascertained position with that of the International boundary line, as described in the Report of the Commissioners appointed under the 6th Article of the Treaty of Ghent,—the Committee of Council have arrived at the conclusion that the Canal is wholly within Canadian Territory.

The Commissioners appointed, under the 6th Article of the Treaty of Ghent, to define that portion of the international boundary line which is embraced in Lake St. Clair district, described it as running from Detroit River "to Lake St. Clair, thence through the "middle of the said Lake, in a direction to enter that mouth or channel of River St. "Clair, which is usually denominated the Old Ship Channel; thence along the middle of "said channel, &c." Therefore, to the eastward of the Old Ship Channel is Canadian territory, and to the westward, American.

The Channel in question, is one which has hitherto been used in common by United States and Canadian vessels, in Navigating between Lakes St. Clair and Huron, and until the Ashburton Treaty of 1842 made all the mouths of the St Clair River equally free to the vessells of other Countries,—there was no other available for Canadian vessels. One of the names by which it was known was the Neutral Channel. Confined by low grass land, its course from the River St. Clair is in a general southerly direction, until it ceases to be bounded by visible banks, when it suddenly bends nearly due west, and stretching in that general direction joins the deep water of Lake St. Clair, about two miles from the point where it left Herson's Island. From Herson's Island to its termination, the Channel is separated from the deep water of Lake St. Clair by an extensive and unbroken shoal on the southern side. The so-called American Canal has been dredged through this shoal in a north-easterly direction, so as to connect the deep water of Lake St. Clair with the Old Ship Channel, at a point near Herson's Island, where the confining banks first become visible,—that is about two miles to the eastward of the natural entrance to the channel.

To maintain that, consistently with the Commissioners' decision, the Canal is in American territory, it would have to be shewn that the Old Ship Channel does not extend to the westward of the point where the Canal joins it. As a matter of fact, however, the channel does so extend for about two miles. But during their investigation of the case, the Committee of Council have discovered a circumstance of a kind well calculated to give rise to misapprehension on this point, and which possibly originated the claim to jurisdiction asserted by the officials of the United States' Gevernment:—

The Boundary Commissioners furnished maps with their Report; and on these maps the boundary line is so placed as to make the Canal appear to be in American territory.

The maps, however, are not receivable at evidence of the exact location of the boundary line determined by the Commissioners; for, by the 6th Article of the Treaty of Ghent, the contracting parties confined the Commissioners' decision, as regards the boundary line, to a "Report or Declaration." And, had it been otherwise, the Commissioners would have had to certify to the accuracy of the boundary line as delineated on the maps; but this they did not do. Again, besides the direct statement of the Commissioners themselves, in recording their decision, that they understood their duty to be to "designate the boundary by a Report or Declaration,"—there is evidence to show that, as regards the location of the line, they intended their maps to be viewed merely as generally illustrating its course. In their Report the course is described with reference to "channels," "straits," 'passages,' &c., but in no case have the channels been deliniated on the maps. The Commissioners made only one direct reference to the boundary line as delineated on the maps, and that reference is parenthetical. They certified to the correctness of the maps as regards the deliniation of rivers, lakes, water-communications, and islands, but made no such certificate as regards the accuracy of the delineation of the boundary line.

Under these circumstances, the position of the boundary line at St. Clair Flats, as indicated by the Commissioners' maps, cannot be accepted as evidence of the Commissioners' intention to describe exactly such a line in their Report. On the contrary, the circumstances indicate that the delineation of the line might be expected to vary from the true line described, and notably at such points as those of which the description depends upon the course of the channels.

The Commissioners, under the 6th Article of the Treaty of Ghent, were not required to mark the boundary line; then what more lucid description of its course, with reference to unmarked channels, could possibly be given than the statement that it runs "along the middle" of these channels? It does not follow that, to render such a description conclusive, the map delineation should agree with it, and in this instance the variation is of such a character as to be quite consistent with the purpose which the Commissioners evidently had in view when furnishing the maps, and with the weight which they knew was attributable to this method of indicating the boundary.

International usage as regards navigable streams whose opposite banks are occupied by different nations,—the recorded language of the United States and British Governments at the time of the Treaty, and since; the attitude of these Governments towards one another, and the principle of "reciprocal advantages and mutual convenience" enjoined by the Treaty of 1783, by which the Commissioners under the Treaty of Ghent were bound to be guided, and directly opposed to an interpretation of the Commissioners' Report which, before 1842, would have had the effect of cutting off all free navigation, where such was possible, through natural channels, in the water separating the two countries.

The claim of nations occupying the opposite banks of streams to the right of navigation, has not only never been successfully disputed, but so inalienable have the United States' Government considered this right, that upon it they found a claim of right to navigation *throughout* such streams, even where they cease to be common boundaries.

But to maintain, now, that the American Canal is in American Territory—is equivalent to asserting that, prior to the Treaty of 1842, Canada had no such right of navigation between Lakes St. Clair and Huron,—and that the privilege she has since had by that Treaty may at any time cease:—for the United States may construct artificial channels through which Canadian vessels may not be permitted to pass, and which would effectually cut off communication through the natural channels. This effect is, indeed, likely to be produced in the Old Ship Channel by the newly cut American Canal.

Holding these views with regard to the International Boundary Commissioners' decision, the Committee of Council believe the action of the United States' Revenue Officers to have been taken under a misapprehension of the facts of the case, and that they may have been confirmed in their error by the circumstance that the new Canal was being constructed by Americans, unaware that, as lately as 1855, the Buffalo Board of Trade began the construction of a Canal at the natural entrance to the Old Ship Channel, but finding that it was partly in Canadian territory, sought and received aid from the Canadian Government to complete the work, and that funds were also supplied for the same purpose by the United States' Government, under whom, for a period of about twelve months, the work was solely carried on, but subsequently completed under the Buffalo Board of Trade

With a view to preventing difficulties in future, it is desirable that the boundary at St. Clair Flats should be marked on the spot, and the Committee of Council recommend that the Mixed Commission about to be appointed to mark the international boundary between the Lake of the Woods and the Rocky Mountains, should be also charged with the duty of locating and marking the boundary designated by the Commissioners under the 6th Article of the Treaty of Ghent.

The Council concur in the foregoing recommendation, and advise that a copy of this minute be transmitted to Her Majesty's Secretary of State for the Colonies, and also to the British Minister at Washington, with a request that proceedings should be suspended against Mr. Hiram Little, pending the decision of the question of boundary, and an

intimation that if it should be found that the Canal recently constructed by the Government of the United States is in Canadian Territory, this Government would be prepared to make suitable compensation for the outlay, or agree to such terms as may be considered equitable, for the joint use of that Canal by the citizens of both countries.

Certified.

W. H. LEE,
Clerk, Privy Council.

Privy Council Office.
14th February, 1871.

(Copy—No. 56.)

OTTAWA, March 7th, 1871.

MY LORD,—With reference to my Despatch, No. 43, of the 16th February, transmitting a copy of a Report of the Privy Council of the Dominion and accompanying papers relating to the International Boundary Line at the mouth of the St. Clair River, I have the honor to forward herewith Copy of a Report by Mr. Gilbert McMicken, which is referred to in Captain Cameron's Report, enclosed in the above named despatch.

I also transmit additional tracings, showing the boundary line between St. Clair River and the Canal recently constructed by the United States.

These documents have only just reached my hands.

I have, &c.,
(Signed), LISGAR.

To The Earl of Kimberley.

(Copy—Canada—No. 380.)

The Secretary of State for the Colonies to the Governor General.

DOWNING STREET, 23rd March, 1871.

MY LORD,—With reference to my Despatch, No. 354, of the 14th of February, and Maps forwarded separately by Crown Agents to previous correspondence respecting the Maps of the Lake and River St. Clair, desired by the Canadian Government in connection with the case of Mr. Hiram Little, I have the honor to transmit to you the copies of the Maps in question as specified in enclosed list.

I have, &c.,
(Signed), KIMBERLEY.

Governor General,
The Right Honorable
Lord Lisgar, G. C. B.

(Copy.)

MAPS—MISCELLANEOUS.

AMERICAN BOUNDARY MAPS.

Channel of Lake St. Clair,	A 1,	Sheets	6	} Joined to make 6 maps.	
do do	„ 2,	„	6		
do do	B 1,	„	6	} do	do
do do	„ 2,	„	6		
do do	D 1,	„	6	} do	do
do do	„ 2,	„	6		
			26		

North Shore, Lake St. Clair,	C 1,	Sheets	6	} Joined to make 6 maps.	
do do	„ 2,	„	6		
do do	„ 3,	„	6		
do do	„ 4,	„	6		
Twelfth Section	1,	„	6	} do	do
do	„ 2,	„	6		
	Total		72		

N. B.—One copy of each Map retained in Colonial Office.

(Copy—Canada—No. 408.)

The Secretary of the State for the Colonies to the Governor General.

DOWNING STREET, 27th April, 1871.

MY LORD,—I have the honor to acknowledge the receipt of Your Lordship's Despatches, Nos. 43 and 56, of the 16th of February, and 7th of March, respectively, the first endorsing a Minute of the Privy Council, with a Report by Captain Cameron, R.A., upon the question of the true position of the International Boundary between the United States and Canada, from Detroit River to River St. Clair through Lake St. Clair, and the latter forwarding further documents bearing on the same question.

The opinion of the Law Officers of the Crown has been taken on these papers, and Her Majesty's Government are advised that the proposition that "maps are not receivable "in evidence of the exact position of the boundary line determined by the Commission-"ers," or that (as put by Captain Cameron) "if the description given in the Commission-"ers' Report be held to support the accuracy of their map, then their decision being "contrary to the intent of the Treaty of 1783, is subject to reconsideration, for the "Commissioners were only authorized to Act in conformity with the true intent of the "said Treaty"—is one which cannot be assented to. The latter proposition amounts to this, that the award of the Commissioners is not to be conclusive, but may be questioned by either party at any time. The duty of the Commissioners to "designate the boundary by a Report or declaration," does not preclude them from declaring the boundary by means of a map if they think fit to do so. Her Majesty's Government are further advised that considering the character of the Report, and of the reference to the map, the latter can only be referred to as illustrating the Report. If the Report and the Map should be found in any particular, at irreconcilable variance, the Report must prevail, but where the written description of the boundary is vague the maps referred to by the Commissioners must be looked to for its clear definition.

It certainly appears improbable that the Commissioners intending no doubt to illustrate and explain their meaning by a map, should have drawn their map altogether at variance with their Report, and it appears very difficult to contend that the Report and the map are irreconcilable, and the conclusion that the one contradicts the other, should not be arrived at except on the most cogent grounds.

Her Majesty's Government are, however, willing to submit to the High Commissioners at Washington the expediency of assenting to the proposal of your Government that "the mixed Commission about to be appointed to mark the International Bounday "between the Lake of the Woods and the Rocky Mountains should be also charged with "the duty of locating and marking the boundary designated by the Commissions under "the 6th Article of the Treaty of Ghent," and the papers will accordingly be forwarded to Her Majesty's High Commissioners by the Secretary of State for Foreign affairs.

I have, &c.

(Signed,) KIMBERLEY.

The Lord Lisgar.

(Copy—Canada—No. 9.)

The Secretary of State for the Colonies to the Governor General

DOWNING STREET, 16th January, 1872.

MY LORD,—I am directed by the Secretary of State for the Colonies to transmit to you, for your information, the documents specified in the annexed Schedule.

I have, &c.,
(Signed), ROBERT G. W. HERBERT.

The Officer administering
the Government of Canada.

No.	DATE.	DESCRIPTION OF DOCUMENT.
	12th January, 1872,	Copy of letter from the F. O., forwarding a Despatch from Sir E. Thornton, covering a copy of a Bill submitted to the U. S. Senate for deepening the St. Clair Flats.

(Copy—No. 280.)

Lord Enfield to the Under Secretary of State, Colonial Office.

FOREIGN OFFICE,
January 12th, 1872.

SIR,—I am directed by Earl Granville to transmit to you, for the information of the Earl of Kimberley, a copy of a despatch from Sir E. Thornton, enclosing a copy of a Bill submitted to the Senate for an appropriation for deepening the St. Clair Flats Canal.

I am, &c.,
(Signed), ENFIELD.

The Under-Secretary of State,
Colonial Office.

(No. 280.)

Sir E. Thornton to Earl Granville.

WASHINGTON, December 25th, 1871.

MY LORD,—I have the honor to enclose 3 printed copies of a bill, which was submitted to the Senate on the 11th inst., by Mr. Chandler, a Senator from Michigan, proposing that $70,000 should be assigned to the object of deepening the St. Clair Flats Canal to not less than 16 feet at all stages of water in the season of navigation.

Should this bill be passed, and should the Dominion of Canada agree to the stipulations concerning it contained in Treaty of 8th May last, the Canadians will, according to the 27th Article of that Treaty, enjoy the use of these 16 feet on terms of equality with the inhabitants of the United States.

I have, &c.,
(Signed), EDWARD THORNTON.

The Earl Granville, K. G., &c., &., &c.

(Copy.)

42nd Congress, 2nd Session.

S. 345.

IN THE SENATE OF THE UNITED STATES,

December 11th, 1871.

Mr. Chandler asked, and, by unanimous consent, obtained leave to bring in the following bill, which was read twice, referred to the Committee on Commerce, and ordered to be printed :—

A BILL

For deepening the St. Clair Flats Canal to sixteen feet.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, that the sum of $70,000 be and the same is hereby appropriated to be expended under the direction of the Secretary of War, for deepening the St. Clair Flats Canal, so as to give a depth of not less than 16 feet at all stages of water in the season of navigation.

(No. 45.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 18th April, 1872; For a statement of the number of cases which, during the three last years, from the 1st day of January, 1869, to the 1st day of January, 1872, were taken before Her Majesty in her Privy Council on Appeal of the Judgments rendered in each of the Provinces of Ontario, Quebec, New Brunswick and Nova Scotia; the number of Judgments in these cases, and the number of the cases which were still pending before the Privy Council on the 1st day of January last.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 17th May, 1872.

(No. 46.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 1st May, 1872; For copies of all Correspondence, Inspector's Reports, and of all other Documents relative to the Establishment of a Daily Mail Service between Joliette, St. Ambroise de Kildare, and the Melanie d'Aillebout, in the County of Joliette.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 15th May, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing, the above Returns are not printed.*]

(No. 47.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 22nd April, 1872;—For a Return shewing all sums of money charged or received on account of salaries, extra services, travelling expenses, or on any other account, by the several Deputy Heads and Officers of Departments at Ottawa, following, to wit:—The Deputy of the Minister of Militia, the Deputy of the Minister of Justice, the Deputy of the Minister of Public Works, the Deputy of the Minister of Agriculture, the Deputy of the Minister of Customs, the Deputy of the Minister of Marine and Fisheries, the Commissioner of Customs, the Commissioner of Inland Revenue, the Under-Secretaries of State for Canada and the Provinces, the Deputy of the Postmaster General, the Deputy of the Adjutant General for Canada, and the several Post-Office Inspectors of the different Provinces, including the Chief Inspector at Ottawa, or any or either of them, for services rendered to the Government as such Deputy Heads of Departments or Officers as aforesaid, for the year ending the 31st March, 1872, and the authority for such payment (if any), together with the vouchers therefor.

By Command,

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 2nd May, 1872.

(No. 47.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 22nd April, 1872;—For a Return shewing all sums of money paid to any Departmental Clerk or Officer, and to whom and when paid, and by whose order, by way of extra pay for extra writing or otherwise, at any time during the fiscal year, ending 30th June, 1871, together with the vouchers therefor.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 17th May, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing, the above Returns are not printed.*]

RETURN

To an Address of the HOUSE OF COMMONS, dated 18th April, 1872;—For Copies of all Correspondence between the Dominion Government and the Government of Ontario, respecting the North-West boundary of Ontario.

By command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF SECRETARY OF STATE,
OTTAWA, 16th May, 1872.

(No. 101.)

GOVERNMENT HOUSE,
TORONTO, 17th July, 1871.

SIR,—I have the honor to call your attention to the necessity which exists for the settlement of the true boundary or division line separating the Province of Ontario from what is known as the North-West Territory.

The importance of accomplishing this object has been recognized both by the House of Commons and the Legislature of this Province, and appropriations made by them for defraying the expense of a Commission for that purpose; one member of which to be appointed by His Excellency the Governor General and the other by myself. As the season is fast advancing, it is desirable that these appointments be made at as early a date as possible.

It would be superfluous to urge the necessity of having the boundary line in question ascertained without delay.

Numbers of emigrants and others are now making their way from Thunder Bay towards Red River, and, when on the route, require to be protected.

With that view, it is necessary that the limits of the territory, on which the authority of this Government extends, be clearly defined, as well as of that over which the Government for the North-West Territory holds jurisdiction.

I would add that this Government, on the appointment of the Commissioners, will be prepared to agree to joint instructions to be given them as their guide in executing the task to be assigned to them.

I have, &c.,

(Signed) W. P. HOWLAND.

The Honorable
The Secretary of State for the Provinces,
Ottawa.

(No. 453.)

OFFICE OF THE SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 20th July, 1871.

SIR,—I have the honor to acknowledge the receipt this morning of your despatch, No. 101, of the 17th instant, calling attention to the necessity which exists for defining the true boundary or division line separating the Province of Ontario from the North-West Territories.

(No. 834.)

Your despatch will be brought under the early notice of His Excellency the Governor General in Council.

I have, &c.,

(Signed) JOSEPH HOWE,
Secretary of State for the Provinces.

The Hon. W. P. Howland, C.B.,
Lieutenant-Governor, Toronto.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 28th July, 1871.

On the application of the Government of the Province of Ontario requesting the Dominion Government to appoint a Commission to act with the Commissioner of the Ontario Government to determine the boundary line between Ontario and the North-West Territories;

The Honorable the Minister of Public Works reports that Parliament voted at its last session the sum of fifteen thousand dollars ($15,000) to pay one half of the cost of surveying the said boundary line, and recommending that a commissioner be appointed, and that the said commissioner be Eugène E. Taché, Esquire, of the City of Quebec.

The Committee submit the above recommendations for your Excellency's approval.

Certified.

(Signed) WM. H. LEE,
Clerk, Privy Council.

To the Honorable
The Secretary of State for the Provinces,
&c., &c., &c.

(No. 482.)

OFFICE OF THE SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 31st July, 1871.

SIR,—With reference to your despatch, No. 101, of the 17th instant, I have the honor to inform you that His Excellency the Governor General in Council has
(No. 834.) been pleased to appoint Eugène E. Taché, Esq., of the City of Quebec, to be a Commissioner to act on behalf of the Dominion with the Commissioner to be appointed by the Government of Ontario to determine the boundary line between that Province and the North West Territories.

I have, &c.,

(Signed) JOSEPH HOWE,
Secretary of State for the Provinces.

The Honorable W. P. Howland, C.B.,
Lieutenant-Governor, Toronto.

GOVERNMENT HOUSE,
TORONTO, 21st September, 1871.

SIR,—With reference to correspondence that has passed on the subject of a Commission to settle the boundary line between Ontario and the North West Territories, I now have the honor of informing you that I have appointed The Honorable William

McDougall, C.B., &c., &c., Commissioner on behalf of this Province, to co-operate with Mr. Taché, the nominee of His Excellency the Governor General in Council.

I have, &c.,
(Signed) W. P. HOWLAND.

(No. 644.)

OFFICE OF THE SECRETARY OF STATE FOR THE PROVINCES.
OTTAWA, 26th September, 1871.

SIR,—I have the honor to acknowledge the receipt of your despatch of the 21st inst., stating with reference to previous correspondence on the subject that you had appointed the Hon. W. McDougall, C.B., Commissioner on behalf of the Province of Ontario, to co-operate with the Commissioner appointed by the Dominion Government, to determine the boundary line between that Province and the North West Territories.

(No. 834)

I have, &c.,
(Signed) G. POWELL.
For the Under Secretary of State for the Provinces.

The Hon. W. P. Howland, C.B.,
Lieut.-Governor, Toronto.

(No. 757.)

OFFICE OF THE SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 30th November, 1871.

SIR,—I have the honor to transmit to you herewith a copy of an order of His Excellency the Governor General in Council on the subject of the granting Mining Licences and Patents for Lands in the neighbourhood of Lake Shebandowan, and in places about the head of Lake Superior.

(No. 1,002).
28th Nov., 1872.

May I request that you will have the goodness to bring the matter under the early notice of your Government, and communicate to me their views thereon for the information of His Excellency in Council.

I have, &c.,
(Signed) JOSEPH HOWE,
Secretary of State of the Provinces.

The Hon. W. P. Howland, C.B.,
Lieut.-Governor, Toronto.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 28th November, 1870.

On a Memo dated 25th November, 1871, from the Honorable the Secretary of State, submitting that applications have been made to him for Mining Licences, and Patents for land in the neighbourhood of Lake Shebandowan, and in places about the head of Lake Superior, and recommending that pending the locating of the boundary line between the North West Territory and the Province of Ontario, no action be taken upon these or any similar applications.

And further recommending that the Lieutenant Governor of Ontario be informed of the course proposed to be taken by Your Excellency's Government, and that it be suggested that the Government of that Province should in like manner refrain from granting Patents or Mining Licences in the region of Country about the head of Lake

Superior and Lake Shebandowan, until after the boundary line shall have been so located, and further submitting that it is of much consequence that the ascertaining and fixing on the ground of the boundary line in question should be as far as possible expedited.

The Committee concur in the above recommendation, and submit the same for Your Excellency's approval.

Certified.
(Signed,) Wm. H. Lee,
Clerk, Privy Council.

To the Honorable
The Secretary of State for the Provinces, &c., &c.

Government House,
Toronto, 6th January, 1872.

Sir,—With reference to your despatch dated 30th November, covering a copy of a report of a Committee of the Privy Council, making certain recommendations as to the issue of Patents in the neighbourhood of Lake Shebandowan, and urging the early settlement of the boundary question; I now have the honor to inform you that the subject has been referred to the consideration of the Commissioner of Crown Lands in this Province, and that as soon as his report upon it can be obtained, the Executive Council will come to a decision in the matter.

In the meantime, I concur in the view expressed in the Minute of the Privy Council that the boundary line in question should be ascertained and fixed with all possible speed, and to prevent unecessary delay, would suggest that a draft of the instructions proposed to be given by the Government of the Dominion to the Commissioner appointed, be transmitted for the consideration of the Government of this Province at the earliest moment.

I have, &c.,
(Signed,) W. P. Howland.

The Honorable
The Secretary of State for the Provinces,
Ottawa.

(No. 14.)

Office of the Secretary of State for the Provinces.
Ottawa, January, 11th, 1872.

Sir,—I have the honor to acknowledge the receipt of your Despatch of the 6th instant, in reply to mine of the 30th November last, in reference to the locating No. 1,002. of the boundary line between the North West Territory and the Province of Ontario, near the head of Lake Superior, and suggesting that a draft of the instructions given by the Dominion Government to the Commissioners appointed on its behalf be furnished to your Government.

I have, &c.,
(Signed,) Joseph Howe,
Secretary of State for the Provinces.

The Honorable W. P. Howland, C.B.,
Lieutenant Governor, Toronto.

(No. 174.)

Office of the Secretary of State for the Provinces.
Ottawa, 14th March, 1871.

Sir,—With reference to your Despatch, No. 138, of the 6th January last, I have the honor, in compliance with the request therein contained, to transmit to you No. 1,002. herewith a copy of the instructions to be given to the Commissioner appointed

to act on behalf of the Dominion of Canada, in the survey and location of the boundary line between the North West Territory and the Province of Ontario.

I have, &c.,
(Signed) JOSEPH HOWE,
Secretary of State for the Provinces.

The Honorable W. P. Howland, C.B.,
Lieutenant Governor, Toronto.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 12th March, 1872.

The Committee have had before them a Memorandum dated 11th March, 1872, from the Honorable the Minister of Justice, stating that reference having been made to him of the Order in Council of the 28th November last, on the subject of applications for Mining Locations and Patents for Land in the neighbourhood of Lake Shebandowan, and about the head of Lake Superior, and also of the Despatch of the Lieuienant-Governor of Ontario, on such Order in Council, he reports :—

That the Lieutenant-Governor in his Despatch of the 6th January, states as follows:—In the meantime I concur in the views expressed in the Minute of the Privy Council, that the boundary line in question shonld be ascertained and fixed with all possible speed ; and to preveht unnecessary delay, would suggest that a draft of the instructions proposed to be given by the Government of the Dominion to the Commissioner appointed, be transmitted for the consideration of the Government of this Province at the earliest moment.

That with the view therefore of meeting the desire expressed by the Lieutenant Governor, and after consultation with Surveyor-General Dennis, he the Minister of Justice recommends that a copy of the draft instructions annexed to his memorandum, be transmitted to the Government of Ontario.

The Committee submit the above recommendations for Your Excellency's approval.

Certified,
(Signed) WM. H. LEE,
Clerk, Privy Council.

To the Honorable
The Secretary of States for the Provinces, &c., &c., &c.

(No. 177.)

OFFICE OF THE SECRETARY OF STATE, FOR THE PROVINCES,
OTTAWA, 15th March, 1872.

SIR,—With reference to my letter of the 14th instant, I have the honor to transmit to you herewith a tracing which it is requested may be substituted for that which accompanied the draft of instructions to be given to the Commissioner appointed by the Dominion, in the survey and location of the Boundary Line between the North-West Territories and the Province of Canada, a copy of which was enclosed in my letter above referred to.

No. 1,002.

May I request that you will have the goodness to cause the tracing for which the enclosed is substituted to be returned to this Department.

I have, &c.,
(Signed) JOSEPH HOWE,
Secretary of State for the Provinces.

The Honorable W. P. Howland, C.B.,
Lieutenant-Governor, Toronto.

OTTAWA, March 11th, 1872.

Reference having been made to the undersigned of the Order in Council of the 28th November last, on the subject of applications for Mining Locations and Patents for Land in the neighbonrhood of Lake Shebandowan, and about the head of Lake Superior, and also of Despatch of the Lieutenant-Governor of Ontario on such Order in Council, he begs leave to report :—

That the Lieutenant-Governor, in his Despatch of the 6th January, states as follows :—"In the meantime, I concur in the view expressed in the Minute of the Privy Council, that the boundary line in question should be ascertained and fixed with all possible speed ; and to prevent unnecessary delay, would suggest that a draft of the instructions proposed to be given by the Government of the Dominion to the Commissioner appointed, be transmitted for the consideration of the Government of this Province at the earliest moment.

The undersigned, with the view therefore of meeting the desire expressed by the Lieutenant-Governor, and after consultation with Surveyor General Dennis, begs leave to recommend that a copy of the draft instructions hereunto annexed be transmitted to the Government of Ontario.

All which is respectfully submitted.

(Signed) JOHN A. MACDONALD.

Draft of instructions to be given to the Commissioner appointed to act on behalf of the Dominion of Canada, in the survey and location of the boundary line between the North-West Territories and the Province of Ontario, in conjunction with a Commissioner to be appointed by the Government of Ontario.

1. The Boundary in question is clearly identical with the limits of the Province of Quebec, according to the 14th Geo. 3rd, Cap. 83, known as the "Quebec Act," and is described in the said Act as follows, that is to say :—Having set forth the westerly portion of the southern boundary of the Province, as extending along the River Ohio "*Westward to the Banks of the Mississippi,*" the description continues from thence; (*i.e.*, the junction of the two rivers), "*and northward to the southern boundary of the territory granted to the Merchants Adventurers of England trading to Hudson's Bay.*"

Having determined the precise longitude west of Greenland of the extreme point of land marking the junction of the north and east banks respectively of the said rivers;

You will proceed to ascertain and define the corresponding point of longitude or the intersection of the meridian passing through the said junction with the international boundary between Canada and the United States.

Looking however at the tracing enclosed marked A, intended to illustrate these instructions, it is evident that such meridian would intersect the international boundary in Lake Superior.

Presuming this to be the case, you will determine and locate the said meridian, the same being the westerly portion of the boundary in question, at such point on the northerly shore of the said lake, as may be nearest to the said international boundary, and from thence survey a line due south to deep water, marking the same upon and across any and all points or islands which may intervene, and from the point on the main shore found as aforesaid draw and mark a line due north to the southern boundary of the Hudson's Bay Territory before mentioned.

This will complete the survey of the westerly boundary line sought to be established.

You will then proceed to trace out, survey, and mark eastwardly, the afore-mentioned "*southern boundary of the territory granted to the Merchants' Adventurers of England trading to Hudson's Bay.*"

This is well understood to be the height of land dividing the waters which flow into Hudson's Bay from those emptyiug into the Valley of the Great Lakes, and forming the northern boundary of Ontario, and the same is to be traced and surveyed, following its

various winding till you arrive at the angle therein between the Provinces of Ontario and Quebec, as the latter is bounded ; having accomplished which the service will have been completed.

Your requisition for such assistance, scientific and otherwise, as may be necessary to enable you to determine the necessary longitude with precision, and to effect the practical surveying operations in the field, and for such instruments as may be required, will receive due consideration.

Further instructions relating to the character of the boundary marks to be erected, conveying other information which you will probably require, will be duly sent you.

GOVERNMENT HOUSE,
TORONTO, 19th March, 1872.

SIR,—I have the honor to acknowledge the receipt of your despatches of the 14th and 15th instant, enclosing tracings with reference to the boundary line between this Province and the North-West Territories, and to return herewith as requested, the tracing enclosed in your former despatch.

I have, &c.,
(Signed) W. P. HOWLAND.

The Honorable
The Secretary of State for the Provinces,
Ottawa.

(No. 444.)

GOVERNMENT HOUSE,
TORONTO, 26th March, 1872.

SIR,—With reference to your despatch, dated 14th instant, relating to the location of the boundary line between the Province of Ontario and the North-West Territories, I have the honor to transmit herewith a copy of an Order in Council approved on the 25th instant, having regard to that matter.

I have at the same time to intimate that the Commissioner appointed on behalf of my Government has been instructed to abstain from any further action under his commission.

I have, &c.,
(Signed) W. P. HOWLAND.

To the Hcnorable
The Secretary of State for the Provinces,
Ottawa.

Copy of an Order in Council approved by His Excellency the Lieutenant Governor, the 25th day of March, A.D., 1872.

The Committee of Council have had under consideration the despatch dated 14th March instant, from the Secretary of State for the Provinces, to Your Excellency, together with the instructions transmitted therewith, and the report of the President of the Council, dated 22nd March instant, in reference thereto.

The Committe advise that the Government of Canada be informed that the Province of Ontario claims that the boundary line is very different from the one defined by the said instructions, and cannot consent to the prosecution of the commission for the purpose

of marking on the ground the line so defined, and that the Commissioner appointed by the Government of Ontario should be instructed to adstain from taking any further action under his commission.

Certified.

(Signed) J. G. Scott,
Clerk of the Executive Council.

Executive Council Chamber,
26th March 1872.

(No. 237.

Office of the Secretary of State for the Provinces,
Ottawa, 5th April, 1872.

Sir,—I have the honor to acknowledge the receipt of your Despatch, No. 444, of the
No. 1159. 26th Ultimo, covering a certified copy of a minute of your Executive Council passed on that day, on the subject of the location of the boundary line between the Province of Ontario and the North West Territories, and at the same time intimating that the commission appointed by your Government to act on their behalf in fixing the said boundary, has bean instructed to abstain from any further action under his commission,

I have, &c.,

(Signed) Joseph Howe,
Secretary of State for the Provinces.

The Honorable W. P. Howland, C.B.,
Lieut.-Governor, Toronto.

(No. 244.)

Office of the Secretary of State for the Provinces,
Ottawa, 10th April, 1872.

Sir,—I have the honor to transmit for the consideration of your Government, a
No. 1159. certified copy of an order of His Excellency the Governor General in
9th April, 1872. Council, on your despatch of the 26th ultimo, on the subject of the location of the boundary line between the Province of Ontario and the North West Territories.

Permit me to call your attention to the concluding paragraph of the Order in Council, and for the reason therein set forth, to invite your government to communicate their opinion on the subject discussed in the order, together with a description of the boundary line which they would suggest as the correct one.

I have, &c.,

(Signed) Joseph Howe,
Secretary of State for the Provinces.

The Honorable W. P. Howland, C.B.
Lieut.-Governor, Toronto.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council on the 9th April, 1872.

To the Honorable
The Secretary of State for the Provinces, &c. &c.

On the Despatch of the Lieutenant Governor of Ontario, dated 26th March last, on

the subject of the location of the boundary line between the Province of Ontario and the North West Territories, the Committee of the Privy Council beg leave to report :—

That in a Despatch from the Secretary of State for the Provinces to the Lieutenant Governor of Ontario, dated 30th November last, based upon a Minute of Council of the 28th November, it was suggested to the Government of Ontario that it was of great consequence that the ascertaining and fixing on the ground of the boundary line in question, should be as far as possible expedited.

That the Lieutenant-Governor in his Despatch of the 6th of January last, expressed his concurrence in the necessity for immediate action, and to prevent unnecessary delay suggested that a draft of the instructions proposed to be given to the Commissioner appointed on behalf of the Dominion to locate the line, should be transmitted for the consideration of the Government of Ontario, at the earliest moment.

That with the view of meeting the desire so expressed, a draft of the instructions was transmitted to the Lieutenant-Governor by Despatch, dated the 14th of March last, and

That the Lieutenant-Governor in reply, transmitted with the Despatch of the 26th of March, now under consideration, an Order of his Executive Council to the following effect :

"The Committee advise that the Government of Canada be informed that the Province of Ontario claims that the boundary line is very different from the one defined by the said instructions, and cannot consent to the prosecution of the Commission for the purpose of marking on the ground the line so defined, and that the Commissioner appointed by the Government of Ontario should be instructed to abstain from taking any further action under his Commission."

The Committee of the Privy Council regret that the Government of Ontario, while expressing their difference of opinion from that of the Dominion, omitted to give their own views on the subject, and they did not state what their claim as to the location of the boundary line was.

As it is of the greatest consequence to the peace and well being of the country in the vicinity of the dividing line, that no questions as to jurisdiction, or the means of prevention or punishment of crime should arise or be allowed to continue, the Committee recommend that the Government of Ontario be invited to communicate their opinion on the subject to Your Excellency, together with a description of the boundary line which they would suggest as the correct one. Should it be found, after an interchange of opinions, that the two Governments cannot agree as to the location of the line, the Committee do not doubt that both Governments will feel it their duty to settle without delay upon some proper mode of determining in an authoritative manner, the true position of such boundary.

Certified.

(Signed) Wm. H. Lee,
Clerk, Privy Council.

Government House,
Toronto, 19th April, 1872.

Sir,—Adverting to the correspondence that has taken place with reference to the settlement of the boundary line between the Province of Ontario and the North West Territories, I have now the honor to transmit a copy of an Order in Council approved this day, having regard to that question, and to invite the attention of the Dominion Government thereto.

I have, &c.,

(Signed) W. P. Howland.

The Honorable
The Secretary of State for the Provinces,
Ottawa.

Copy of an Order in Council approved by His Excellency the Lieutenant Governor the nineteenth day of April, A.D., 1872.

The Committee of Council have had under consideration the despatch from the Secretary of State for the Provinces of the 10th inst., on the subject of the Boundary line of Ontario and the Copy of an approved Minute of the Privy Council of Canada enclosed. In this minute the Privy Council regrets "That the Government of Ontario, while ex-"pressing their difference of opinion from that of the Dominion, omitted to give their "own views on the subject, and did not state what their claim as to the location of the "Boundary was."

The Committee would observe that the despatch on which their Minute was founded did not contain any invitation to the Government of Ontario to express its views or state its claim.

The Government of Ontario is now invited to do so, and the Committee advise that the Government of Canada should be informed that this Government proposes the boundary contained in the annexed description.

The Committee further advise that the Government of Canada should be informed that as to the Western limit in the opinion of this Government there are grounds for maintaining the contention of former Governments of Canada, that the limit of Ontario is further West than the one proposed in the description, and that while this Government is prepared in view of all the circumstances to agree to the Western limit so proposed in case the same is accepted by the Government of Canada, this Government does not consider itself bound by the proposal in any other event.

As to the Northern limit it will be observed from the description that this Government maintains the position which is supported by the contentions of all former Governments, and by the indisputable facts that the Northern boundary lies North of the watershed of the St. Lawrence system, the line of which watershed is the Northern boundary laid down by the Government of Canada, and the Committee advise that the Government of Canada should be informed that in view of all the circumstances this Government will be prepared in case its position as to the Northern boundary is agreed to by the Government of Canada, to consider any proposal which may be made by that Government for the establishment of a conventional limit to the North of that watershed

Certified.

(Signed) J. G. Scott,
Clerk of the Executive Council.

Proposed Descriptio i referred to in the annexed Minute of Council.

The boundary line of Ontario is the international boundary from the mouth of the Pigeon River, on Lake Superior to a point West of the Lake of the Woods, where the International boundary line would be intersected by a line drawn North from the source of Mississippi River, thence the boundary line of Ontario runs North to the point of intersection of the Southern boundaries of the Hudson's Bay Territories, thence the boundary line of Ontario is the Southern boundary of those territories to the point where that boundary would be intersected by a line drawn North from the Head of Lake Temiscaming.

No. 273. Office of the Secretary of State for the Provinces.
Ottawa, 22nd April, 1872.

Sir,—I have the honor to acknowledge the receipt of your despatch of the 19th

(No. 1159.)
19th April, 1872.

instant, adverting to previous correspondence with reference to the settlement of the boundary line between the North West Territories and the Province of Ontario, and covering a copy of an order of your Executive Council in relation to that question.

I have, &c.,

(Signed) JOSEPH HOWE,
Secretary of State for the Provinces.

The Hon. W. P. Howland, C.B.,
Lieutenant Governor, Toronto.

(No. 343).

OFFICE OF THE SECRETARY OF STATE FOR THE PROVINCES,
OTTAWA, 16th May, 1872.

No. 1159.

SIR,—Referring to your despatch of the 19th ultimo, covering an Order in Council of the Government of Ontario of the same date, on the subject of the northern and western boundaries of that Province, I have the honor to enclose, for the information of your government, a copy of an Order of the Governor-General in Council, dated to-day, together with a copy of the memorandum of the Honorable the Minister of Justice mentioned therein.

2. I am, at the same time, for reasons set forth in the memorandum, to invite the Government of Ontario to concur with the Government of Canada in a statement of the case now in dispute between the said governments, respecting such boundaries, for immediate reference to the Judicial Committee of the Privy Council, with a view to the settlement by a judgment or decision of that tribunal of the western and northern boundaries of Ontario.

3. I am also to urge upon the Government of Ontario the necessity, in view of the facts stated in the last paragraph of the accompanying memorandum, of arranging with the Government of the Dominion for some joint course of action as to the granting of land and of mining licenses, reservation of royalties, &c., in the portion of territory in controversy; and for this purpose I have to request you to move your goverment to appoint a Commissioner to meet the Hon. J. C. Aikins to arrange such joint system on the understanding that any such arrangement when ratified by the two governments shall be held to bind both, and shall be subject to the decision of the judicial committee of the Privy Council upon the question of the boundary, and that, after such decision, titles of lands or mining rights shall be confirmed by the government, whether of Canada or of Ontario, which shall, under the decision of the Privy Council, be the proper party to legalize the same.

I have, &c.,

(Signed) JOSEPH HOWE,
Secretary of State for the Provinces.

The Honorable W. P. Howland, C.B.,
Lieutenant-Governor, Toronto.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor-General in Council, on the 16th May, 1872.

The Committee of Council have had under consideration the annexed memorandum, dated May 1st, 1872, from the Hon. the Minister of Justice, having reference to the settlement of the question of the northern and western boundaries of the Province of

Ontario; and they respectfully report their concurrence in the recommendations submitted in the said memo., and advise that the same be approved and adopted.

Certified,

(Signed) W. H. Lee,
Clerk, Privy Council.

To the Honorable
The Secretary of State for the Provinces, &c., &c., &c.

Department of Justice,
Ottawa, May 1st, 1872.

With reference to a despatch of the Lieutenant-Governor of Ontario, of the 19th April, transmitting an Order in Council of that Province of the same date, on the subject of the northern and western boundaries of the Province of Ontario, and in which the government of that Province transmits a description of what it holds those boundaries to be.

The undersigned has the honor to report that a considerable difference exists between the Government of Canada and that of Ontario, in respect to the said northern and western boundaries of Ontario, and until such boundaries are properly ascertained and defined, no criminal jurisdiction can be effectively established or exercised in the disputed territory.

Having reference to the prospect of a large influx of people into the North-West Territories, it is very material that crime should not go unpunished or unprevented, and in this view the undersigned has the honor to suggest that the Government of Ontario be invited to concur in a statement of the case for immediate reference to the Judicial Committee of the Privy Council of England, with a view to the settlement by a judgment or decision of that tribunal, of the western and northern boundaries of Ontario.

This is the more necessary as no conventional arrangement between the two governments as to boundary can confer criminal jurisdiction on the courts of Ontario, unless the place where any crime may be committed is by law within the Province.

The undersigned has the honor also to call attention to the fact that the mineral wealth of the north-west country is likely to attract a large immigration into those parts, and with a view to its development, as well as to prevent the confusion and strife that is certain to arise and continue among the miners and other settlers so long as the uncertainty as to boundary exists; the undersigned begs leave to recommend that the Government of Ontario be urged to arrange with that of the Dominion for some joint course of action as to the granting of land and of mining licenses, reservation of royalties, &c. And, for this purpose, he would suggest that the Government of Ontario be moved to appoint a Commissioner to meet the Hon. J. C. Aikins, and arrange some joint system; and that any such arrangement when ratified by the two governments shall be held to bind both, and shall be subject to the decision of the Judicial Committee of the Privy Council upon the question of the boundary; and that after such decision, titles to lands, or mining rights shall be confirmed by the government whether of Canada or Ontario, which shall, under the decision of the Judicial Committee, be the proper party to legalize the same.

All which is respectfully submitted.

(Signed) John A. Macdonald.

(No. 49.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated the 1st May, 1872;—For copies of all Correspondence since the 1st November last, between the Government, the Agent at Caughnawaga, and the Iroquois Indians, relative to the conduct of the Chiefs of those Indians; and also of all communications from the said Chiefs in explanation of their conduct.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 20th May, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing, the above Return is not printed.*]

(No. 50.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 18th April, 1872;—For copies of all Accounts paid or received for Departmental and Confidential Printing since the date of last Returns, with the Orders in Council relating thereto, and of all Accounts paid or received for Binding since the work was given without tender to the present Contractor.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 16th May, 1872.

FINANCE DEPARTMENT,

OTTAWA, May 15, 1872.

SIR,—I have the honor to enclose sundry statements, in accordance with an Address of the House of Commons, respecting Confidential Printing.

Your obedient servant,

JOHN LANGTON,
Auditor.

E. Parent, Esq.

(Copy.)

OTTAWA TIMES PRINTING & PUBLISHING COMPANY,
South Wellington Street, (formerly Her Majesty's Theatre.)

OTTAWA, 187

Privy Council

To the *Ottawa Times*.

1871.

April 28. To Printing (Confidential) 25 copies Lieut. Butler's Report. :—

Press work, 12 tokens	35cts.		$4 20
Paper, 7 quires,	25cts.	1 75	$5 95

Settled, September 16, 1871.

(Signed), JAS. BAILIFF,
Manager.

RETURN OF CONFIDENTIAL PRINTING done under Requisitions of Queen's Printer, and audited by him from 15th October, 1870, date of last Return (contained in Report of Secretary of State of Canada, for 1870,) to 31st March, 1872.

BY MONTHS.

Month.	Year.	Year ended 12th Oct., 1871, per last Report.	Amount called for from date of last Report, to 31st March 1872.	Total.
		$ cts.	$ cts.	$ cts.
November	1870	10 03		
December	"	657 60		
January	1871	72 72		
March	"	325 43		
do	1872	.....	28 32	
		1,065 78	28 32	1,094 10

RETURN OF CONFIDENTIAL PRINTING—*Continued.*

BY DEPARTMENTS.

DEPARTMENT.	Year.	Year ended 12th Oct., 1871, per last Report.	Amount called for from date of the last Report, to 31st March 1872.	Year.
		$ cts.	$ cts.	$ cts.
Finance		417 23		
Marine and Fisheries		550 60		
Privy Council		97 95		
Sec. State Provinces, Indian Branch			28 32	
		1,065 78	28 32	1,094 10

B. CHAMBERLIN,
Queen's Printer.

OFFICE OF THE QUEEN'S PRINTER,
OTTAWA, 31st March, 1872.

(1,417.)

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 3rd May, 1870.

The Committee have had under consideration a memorandum, dated 2nd May, 1870, from the Honorable the Secretary of State, representing that his attention has been called to the necessity of establishing a rule for the guidance of the Finance Department in the payment of accounts for Departmental printing, and recommending that henceforward all confidential documents sent from any Department to be printed, shall be considered and treated as ordinary printing of the Privy Council Office; and on the receipt of the printer's account therefor, and of the certificate of the Minister ordering the same, the charges shall be checked by the Queen's Printer, according to a tariff to be hereafter established.

The Committee submit the above recommendation for Your Excellency's approval.

Certified.

WM. H. LEE,
Clerk, Privy Council.

(1,417.)

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council, on the 26th October, 1870.

On a communication, dated 24th October, 1870, from the Queen's Printer, reporting in reference to the Confidential Printing for the Departments, which forms the subject of the Order in Council of 3rd May last, that, as in its execution no opportunity of profit from rule and figure work, catalogue work, change of headings or titles, &c., &c., occurs, as in the ordinary printing, or is reduced to a minimum, the present contract rates are manifestly and largely insufficient.

That for the most part the setting will be solid, to be paid for to the journeymen, at the rate of 25 cents per 1,000 ems. That more than that is now paid, he believes. That on these wages 25 per cent. for rent, fuel, light, wear and tear of material and profit is not an exorbitant charge, nor is 12½ per cent. an extravagant allowance for the extra care required for confidential work. That in fact that extra allowance is paid to one firm in Montreal by the Montreal Agency for the printing of its book, which is of necessity absolutely confidential. That this would give a price altogether of between 34 and 35 cents per 1,000 ems. That he would recommend that 35 cents should be paid. That inasmuch as extraordinary care is peculiarly required in the press room also, for confidential work, and it is generally printed in small numbers, a similar price is not too much for the average token, and he recommends that 35 cents per token be also given for the press work to the party employed.

On the recommendation of the Honorable the Secretary of State the Committee advise that 35 cents per token be given for the press work to the party employed, and 35 cents for every 1,000 ems.

Certified.

WM. H. LEE,
Clerk, Privy Council.

RETURN of amounts paid I. B. Taylor for Binding for Departments under contract executed 1st May, 1871.

Department.	May, 1871.	June, 1871.	July, 1871.	August, 1871.	September 1871.	October, 1871.	November 1871.	December, 1871.	January, 1872.	February, 1872.	March, 1872	Total.
	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.	$ cts.
Agricultural, including Census	5 32	41 02	65 17	43 10	4 68	.....	4 41	10 46	63 75	15 80	92 08	$345 79
Bank of Upper Canada	.....	.....	.....	.....	11 97	.....	.....	.....	.....	.....	.....	11 97
Customs	255 45	105 36	475 46	102 44	153 37	75 60	144 37	39 30	13 76	229 68	18 41	1,613 20
Finance, including stationery, &c.	64 26	327 47	32 13	4 08	14 77	17 71	13 28	504 80	203 71	295 14	61 47	1,538 82
Governor General	8 54	6 67	.....	.....	.....	.....	6 41	21 08	.....	.....	.....	42 79
Inland Revenue	251 15	40 03	78 27	206 10	8 45	93 88	209 16	76 01	125 95	15 53	63 75	1,168 28
Intercolonial Railway	.....	.....	.....	3 18	5 66	.....	.....	.....	.....	.....	.....	8 84
Justice	10 34	1 35	10 86	32 09	38 10	22 55	6 00	9 13	46 99	2 71	13 64	193 76
Library of Parliament	.....	.....	.....	5 45	.....	.....	.....	.....	.....	.....	.....	5 45
Marine and Fisheries	27 48	4 48	5 58	19 41	35 48	61 17	2 96	4 80	36 76	6 97	1 29	206 38
Militia and Defence	3 15	8 52	3 52	25 90	31 63	10 01	22 68	.....	37 69	2 70	7 60	153 40
Post Office	356 23	244 03	1,101 68	941 68	1,554 76	464 58	221 16	146 17	1,243 79	568 33	600 85	7,443 22
" Savings Bank	.....	138 69	24 70	66 81	10 52	11 54	.....	27 02	9 46	26 84	59 36	374 94
Privy Council	.....	.....	0 28	.....	20 13	4 38	.....	.....	70 82	9 70	.....	105 31
Public Works	0 90	.....	35 26	.....	41 55	79 13	15 36	173 79	37 47	7 56	.....	391 02
Receiver General	.....	356 89	8 47	.....	60 07	60 00	4 55	58 14	.....	.....	14 07	562 19
Secretary of State of Canada, including Queen's Printer, &c.	11 55	369 21	118 62	.....	17 99	38 32	20 70	6 38	.....	45 65	110 16	738 58
Secretary of State for Provinces	5 57	27 57	39	2 37	.....	.....	.....	19 36	5 04	1 35	.....	61 65
	$999 94	1,671 38	1,960 35	1,452 61	2,009 13	938 87	671 04	1,096 44	1,895 19	1,227 96	1,042 68	14,965 59

OFFICE OF THE QUEEN'S PRINTER,
OTTAWA, May, 1872.

B. CHAMBERLIN,
Queen's Printer.

(No. 51.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 25th April, 1872;—For copies of all Tenders sent in for repairing or enlarging the Grenville Canal, and also for copies of all Contracts entered into, Orders in Council, and all other documents relating thereto.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 22nd May, 1872.

(No. 52.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 20th May, 1872;—For copies of all Reports made to the Department of Public Works, by the Engineer in charge of the Survey of the Welland Canal in 1871, giving the quantity of earth and rock excavation required to be done to complete the Canal for Lake Erie Level, by Port Colborne and Port Maitland route respectively; also copies of any Reports on the same subject by the Chief Engineer of the said Department.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 23rd May, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing, the above Returns are not printed.*]

RETURN

To an ADDRESS of the HOUSE of COMMONS, dated 20th May, 1872; For a Return of all Correspondence with the Government of the United States, and persons in the Dominion, on the subject of Meteorological Observations and Weather Reports.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 12th June, 1872.

OTTAWA, 12th June, 1872.

SIR,—I have the honor to enclose herewith Return to the Address of the Honorable the House of Commons, of 20th May last, calling for Correspondence on the subject of meteorological observations and weather reports.

I beg also to enclose file No. 863, of your Department, in reference to this return.

I have the honor to be, Sir,
Your most obedient servant,
WM. SMITH,
Deputy Minister of Marine and Fisheries.

E. Parent, Esq.,
Under-Secretary of State.

CONTENTS.

DIVISION I.

CORRESPONDENCE between Professor Kingston, Toronto, and the Department of Marine and Fisheries.

From Professor Kingston.			From Department.		
No.	Date.	Page.	No.	Date.	Page.
1	13th October, 1870.....	3	2	3rd November, 1870.....	5
3	22nd November, ,, ...	5	4	5th December, ,, ...	10
5	7th December, ,, ...	10	6	24th March, 1871.....	11
7	31st March, 1871.....	11	10	16th May, ,, ...	21
8	25th April, ,, ...	15	13	29th May, ,, ...	24
9	6th May, ,, ...	16	14	7th June, ,, ...	25
11	19th May, ,, ...	22	17	16th June, ,, ...	27
12	23rd May, ,, ...	23	19	22nd June, ,, ...	28
15	7th June, ,, ...	25	21	4th September, ,, ...	31
16	13th June, ,, ...	26	22	13th September, ,, ...	31
18	21st June, ,, ...	28			
20	26th June, ,, ...	29			
23	16th September, ,, ...	31			
24	Together with report to Council by Minister of Marine and Fisheries, dated 28th April, 1871.....	32			

Division II.

Correspondence between Professor Kingston, Toronto, and the Signal Office, Washington, United States.

From Professor Kingston.			From Signal Office		
No.	Date.	Page.	No.	Date.	Page.
25	6th June, 1871.....	32	26	9th June, 1871.....	33
27	12th July, ,, ...	33	29	16th October, ,, ...	35
28	10th October, ,, ...	34	31	27th October, ,, ...	36
30	23rd October, ,, ...	36	33	6th November, ,, ...	37
32	30th October, ,, ...	37	35	27th November ,, ...	38
34	8th November, ,, ...	38	37	16th December, ,, ...	39
36	12th December, ,, ...	38			
38	14th February, 1872.....	39			

Division III.

Correspondence between Dr. Smallwood, Montreal, and the Signal Office, Washington, United States.

From Dr. Smallwood.			From Signal Office.		
No.	Date.	Page.	No.	Date.	Page.
	Copies not kept.		39	2nd April, 1871.....	39
			40	14th April, ,, ...	40
			41	23rd May, ,, ...	40
			42	6th June, ,, ...	41
			43	21st June, ,, ...	41
			44	1st July, ,, ...	42
			45	9th July, ,, ...	42
			46	22nd July, ,, ...	42
			47	24th August ,, ...	43
48	Together with a letter from Dr. Smallwood, to the Minister of Marine and Fisheries, dated 12th June, 1871.....				43
49	Department of Marine and Fisheries, to Dr. Smallwood, dated 20th June, 1871.....				44

(No. 1.—Copy.)

PROFESSOR KINGSTON TO HON. P. MICTHELL.

MAGNETIC OBSERVATORY, TORONTO, 13th Oct., 1870.

SIR,—I have the honor respectively to request that you will be pleased to sanction the employment of some of the lighthouse keepers, in different parts of the Dominion, in taking certain simple meteorological observations in connection with a system which, with some measure of success, I am endeavoring to organize throughout the Dominion, and of which the Toronto Observatory is the centre.

In order that you may understand my purpose in addressing you, I will take the liberty of laying before you my views, as to the organization that should *eventually* be in operation, and the preliminary steps that should be taken now; and also, give an account of what has been done towards the object.

The complete and *future* organization would need the following agencies, which I shall refer to as I, II, III.

I. A meteorological office to exercise supervision over the observing stations, as regards instruments, modes of registration, &c., &c., and also to receive reports from them for reduction and compilation.

II. *a.* A few well equipped stations where observations may be taken, day and night, at *equal* intervals, not exceeding *three* hours, for determining certain *constants* needed in reducing observation from inferior stations.

b. A few similarly equipped stations, in telegraphic communication with the central office, to supply materials for storm warnings. *a* and *b* would often, though not always, be identical.

III. Numerous stations more or less furnished according to the duties to be performed.

On the manner of defraying the cost of organization.

I. The central office to be supported entirely by the Dominion.

II. In some instances it may be requisite for the Dominion to establish and defray the entire cost of stations in the sub-classes *a* and *b*, but it is possible that private observers, or others supported partly by academic or provincial or any local sources, may be induced to add to their labours to the extent required, by the payment of a moderate annual subsidy.

III. The large mass of observers would be unpaid, and for the most part bear the cost of the instruments which they use; but in some cases, it may be expedient to *lend* instruments to them on the condition of their making periodic reports.

The formation of any such organization should be *gradual*, that all concerned in it may be *educated* to their work. The sudden establishment of a full grown system would entail enormous expense, and probably fail after all. This is strikingly true with regard to *storm warnings*, for the official issue of which I consider that we are not yet prepared, but need first the collection of data by which our storms may be studied.

Temporary Arrangements.

I. *Meteorological Office.*—The Toronto Observatory, a Dominion Institution, for thirteen years under the Imperial Government, and supported for more than seventeen years by the general Government of Canada, may be fitly regarded (provisionally at least) as the central meteorological office. As the work grows, additional computers will be needed, but at present, with my regular staff, and such supernumerary aid as I am empowered to employ, I am able to undertake and in fact do actually perform the duty referred to.

II. *Chief Stations.*—These will grow out of Class III, as Observers give evidence of special adaptation for their work.

III. To increase the number and efficiency of ordinary stations, a moderate annual grant would be needed to supplement local or private liberality, by purchasing instruments to be *lent* to observers on condition of their conforming to the regulations of the central office. I believe that the cause would be best served by placing the selection and distri-

bution of instruments, *entirely* under the central office; but if a strong desire be shown by local associations to manage their share of the grant, it might be well to accord to them that privilege, subject, however, to their working in harmony with the general system. As regards the sum required, I consider that $200 for each Province, including Manitoba, or $1,000 in all, would not be too much; but I believe that I could obtain very valuable data in one branch of the science with a much smaller sum.

The judicious employment of a small annual grant, besides gaining its proper equivalent, would be the means of developing gratuitous services that would otherwise be lost, and, as a collateral advantage, would lead to the discovery of agents for carrying out a future and more perfect system.

The grant referred to would be for ordinary or minor stations (some of which could be furnished at sums varying from $3.00 to $10.00 each). The *chief* stations in 11, of which there should be *one* in each of the Provinces of Nova Scotia and New Brunswick, at least *two* in each of the larger Provinces, *one* in Manitoba, and at least *one* at some point or points between Manitoba and Canada proper, would need separate consideration.

Present condition of the Organization.

During the last year I have procured the establishment of nineteen new minor stations in Ontario, and have opened correspondence with

6 Stations in Quebec.
9 " " Nova Scotia.
2 " " New Brunswick.

Of the nineteen stations in Ontario, eight are worked with instruments lent for the purpose, but at the others the observers have provided instruments at their own cost. In every case however the instruments have passed through my hands. For eight of the stations in N.S. I am indebted to the energy of Mr. F. Allison, of Halifax. Mr. Murdoch, of St. John, N.B., has served the cause very efficiently, and I consider that both these gentlemen deserve great credit for their sustained devotedness to the science. Dr. Smallwood, also, of Montreal, has given me his cordial support.

The Rev. Dr. Ryerson has kindly allowed me the temporary use of the meteorological returns from the ten Ontario Grammar Schools, so that I have directly or indirectly forty-six stations communicating with me.

The managers of the railways have shewn their appreciation of the work, by allowing their station masters to act as observers when invited by me to do so, and a so by giving free passes to enable me either in person or by deputy to visit the meteorological stations,—frequent visitation being a part of the arrangement on which its success greatly depends.

Having given a description of the organization, sufficient to make the object of my application intelligible, I will recur to the request with which I began this letter.

It is easy to see that the lighthouses, placed near the highways of commerce and usually in exposed positions, are well adapted in a local point of view for furnishing data with which to study the great atmospheric movements. They present facilities also of a personal kind, as the keepers, besides being steady men, are necessarily compelled to be at their posts. I am therefore very anxious to secure the voluntary and gratuitous services of some of these persons to take certain observations (the details of which I need not now give), and to transmit their returns to me, either directly or through your Department, and I earnestly hope that you will give your sanction to my proposal.

The printed forms for registration and the instructions I would supply gratuitously; and as to the instruments, although progress would be hastened if you saw fit to charge your Department with their cost, I would undertake myself the responsibility, rather than that this consideration should be a bar to your consent.

In the event of your regarding my request with approval, I will take an early opportunity to visit Ottawa, and confer with your Department respecting the selection of stations and other details, and in the course of the winter would procure and test the instruments preparatory to commencing work next spring.

I have, &c.,
(Signed,) G. T. KINGSTON, Director.

(No. 2.—Copy.)

THE DEPUTY OF MINISTER OF MARINE AND FISHERIES TO PROFESSOR KINGSTON, TORONTO.

OTTAWA, 3rd November, 1870.

SIR,—I have to acknowledge receipt of your letter of the 13th inst., addressed to the Minister of Marine and Fisheries, requesting him to sanction the employment of some of the lighthouse keepers, in different parts of the Dominion, in taking certain simple meteorological observations in connection with the system which you are endeavoring to organize throughout the Dominion, and of which the Toronto Observatory is the centre; also, informing him that the printed forms for registration, and the instructions you would supply gratuitously, and with reference to the instruments, although progress would be hastened if their cost was charged to this Department, you would undertake yourself the responsibility of furnishing, rather than that this consideration should be a bar to the projected undertaking; also stating, that in the event of your request being favorably considered, you would take an early opportunity to visit Ottawa, and confer with this Department respecting the selection of stations and other details, and in the course of the winter would procure and test the instruments preparatory to commencing work next spring. In reply, I have to inform you that the Minister of Marine and Fisheries approves of the scheme proposed by you, and when you have selected the stations at which you require the observations to be made, will give the necessary directions to the lighthouse keepers to carry out your views in the matter.

As the Minister has no funds at his disposal for the purpose of procuring the instruments alluded to by you, he cannot undertake at present to find the necessary means for purchasing them, but when you make your proposed visit to Ottawa, he will then be able to ascertain from you the description and cost of the instruments required, and will then give the matter due consideration.

I am, &c.,
(Signed,) WM. SMITH,
Deputy of Minister of Marine, &c.

(No. 3.—Copy.)

PROFESSOR KINGSTON TO THE DEPUTY OF THE MINISTER OF MARINE AND FISHERIES.

MAGNETIC, OBSERVATORY,
TORONTO, CANADA, 22nd Nov., 1870.

SIR,—Herewith I send two sheets containing a list of lighthouses from which I propose that the meteorological observers should be selected, and I shall be much obliged if you will kindly procure for me the information indicated by the headings of the columns.

I have also to request answer to the following questions.

I remain, &c.,
(Signed,) G. T. KINGSTON.

Questions.

1. Are the lighthouses usually or always furnished with wind vanes?
2. Are there any marks by which the true points of the compass are known?
3. Would 7. a.m., 2 p.m. and 9 p.m. suit the duties and habits of the keepers on *ordinary* days as hours of observation?
4. Would it be practicable in the case of heavy gales to make a record of the wind at intervals of six hours, in addition to the observations at the regular hours?

LIST of Light Houses, from which Professor Kingston, of the Toronto

Number on Admiralty List.	Name of Light.	Place.	Latitude. — Longitude.	In operation from to.	Artisan within reach.
			° '		
1	Belle Isle.	Extreme S. point of island..	{ 51 53 N. 55 22 W. }		
2	Amour Point	Forteau Bay, S.E. side....	{ 51 28 N. 56 51 W. }		
	Cape Ray	Newfoundland	.....		
22	St. Paul's Island.....	N.E. point of island.....	{ 47 14 N. 60 08 W. }		
24	Amherst	Magdalen Islands	{ 47 51 N. 61 09 W. }		
25	Rosier Cape	On Cape.....	{ 48 52 N. 64 12 W. }		
28	Heath Point.....	Anticosti Island	{ 49 05 N. 61 42 W. }		
29	S.W. point	,, ...	{ 49 24 N. 63 36 W. }		
30	W. point	,, ...	{ 49 53 N. 64 32 W. }		
31	Point des Monts	.....	{ 49 20 N. 67 22 W. }		
32	Father Point	Rimouski..... ...	{ 48 31 N. 68 27 W. }		
33	Bicquette.....	Bicquette Island	{ 48 25 N. 68 53 W. }		
	Sable Island	Sable Island.....	.....		
36	Brandy Pots.....	S.E. end of islet	{ 47 53 N. 69 41 W. }		
38	Grande Isle.....	Kamouraska	{ 47 38 N. 69 52 W. }		
98	Snake Island	Five miles west of Kingston	{ 44 11 N. 76 33 W. }		
100	Outer Drake.....	Drake Island	{ 43 57 N. 76 49 W. }		
103	Presqu'Isle.....	E. shore	{ 44 01 N. 77 41 W. }		
104	Presqu'Isle	Hill on shore	{ 44 00 N. 77 42 W. }		
106	Peter Rook	Gull Island	{ 43 57 N. 78 13 W. }		
115	Oakville.....	Pier Head	{ 43 27 N. 79 41 W. }		
118	Port Colborne	W. Pier Head	{ 42 54 N. 79 17 W. }		
126	Pelee Island.....	N.E. point	{ 41 50 N. 82 38 W. }		
127	Pelee Spit	S. of extreme end	{ 41 52 N. 82 30 W. }		
128	Amherstburg	Bois Blanc Island.....	{ 42 05 N. 83 07 W. }		
131	Clark Point.....	20 miles N.E. of Goderich .	{ 44 04 N. 81 44 W }		
132	Chantry Island	2½ miles W. of Saugeen....	{ 44 04 N. 81 44 W. }		
133	Isle of Coves.....	Entrance to Grand Bay....	{ 45 20 N. 81 44 W. }		
134	Griffith Island.....	20 miles from Owen Sound.	{ 44 41 N. 80 42 W. }		
135	Nottawasaga Island.....	4 miles from Collingwood..	{ 44 33 N. 80 08 W. }		

Observatory, proposes to select some for Meteorological Stations.

Communication.				Name of Person in charge.	Age, within 10 years.	Previous Occupation.	General Qualifications.	Mechanical skill.	Remarks.
Telegraph.	Mails.	Parcels.	Visits.						

LIST of Light Houses, from which Professor Kingston, of the Toronto Observa-

Number on Admiralty List.	Name of Light.	Place.	Latitude. — Longitude.	In operation from to.	Artisan within reach.
			° '		
137	Christian Island	¼ mile from main land.....	44 47 N. 79 58 W.		
138	Red Rock	Red Rock Point	45 48 N. 81 36 W.		
141	Clapperton Island	N. Point	46 04 N. 82 19 W.		
	Sulphur Island.....	Grand Bay	.....		
	Lonely Island.....	,, ...	.....		
142	St. Ignace	3 miles from island.....	48 50 N. 82 00 W.		
143	Miscou Island	Birch Point.....	48 01 N. 64 00 W.		
144	Miramichi Bay	Escuminac Point	47 05 N. 64 48 W.		
165	Sea Wolf Island	Summit Island.....	46 21 N. 61 16 W.		
170	Scattarie Island.....	N.E. Point.....	46 02 N. 59 40 W.		
172	Canso Gut	W. Side.....	45 42 N. 61 29 W.		
173	,, ...	Sand Point	45 31 N 61 15 W.		
177	Canso Cape.....	Cranberry Island.....	45 20 N. 60 55 W.		
179	Beaver Islands.....	William Island	44 50 N. 62 20 W.		
191	Liverpool Bay	Coffin Island.....	44 02 N. 64 38 W.		
200	Seal Island	Bay of Fundy	43 24 N. 66 01 W.		
206	Digby or Annapolis	Prim Point.....	44 42 N. 65 48 W.		
220	Lepreau.....	Bay of Fundy.....	45 04 N. 66 28 W.		
224	Machias Island	Eastern Light	44 30 N. 67 06 W.		

tory, proposes to select some for Meteorological Stations.—*Continued.*

Communication.				Name of Person in charge.	Age, within 10 years.	Previous Occupation.	General Qualifications.	Mechanical skill.	Remarks.
Telegraph.	Mails.	Parcels.	Visits.						

(Copy, Enclosure.)

Rules for filling up Paper relative to Lighthouses for Meteorological Stations.

In column "Artisan within reach," if there be any :—

Suitable artisan, write.....X.
If there be none, write.....O.
If the keeper be a mechanic, write.....Keeper.

In column "Telegraph," write X or O, according as there is or is not a telegraph station near at hand.

In columns	Mails	Daily mails to be expressed by....	D
,, ,,	Parcels	Weekly.....	W
,, ,,	Visits	Two or three times a week.....	2 W, 3 W, &c.
		Monthly by.....	M

If only once or twice in the year, name the month.

General qualifications and mechanical skill :—

To be expressed by such terms as..... { Poor. / Moderate. / Good. / Very good.

(No. 4.—Copy.)

THE DEPARTMENT OF MARINE AND FISHERIES TO MR. KINGSTON.

OTTAWA, 5th December, 1870.

SIR,—I have to acknowledge receipt of your letter of the 22nd ult., enclosing two sheets containing a list of lighthouses, and requesting certain information, in view of establishing meteorological stations at the lighthouses referred to. In reply, I am to inform you that I have written to the agents of the Department to supply the information, which is not already in possession of the Department, and as soon as this is received I will have the lists filled up and returned.

I am, &c.,
(Signed,) WM. SMITH,
Deputy of Minister of Marine, &c.

(No. 5.—Copy.)

PROFESSOR KINGSTON TO THE HON. P. MITCHELL.

MAGNETIC OBSERVATORY,
TORONTO, 7th Dec., 1870.

SIR,—In a letter which I had the honor of addressing to you on Oct. 13th, 1870, I gave a brief sketch of the organization which, in my opinion, should eventually be brought into operation for prosecuting climatological enquiries in Canada, and of the preliminary measures to be taken in view of the gradual development of the work.

I also requested your sanction to the employment of some of the lighthouse keepers in taking simple meteorological observations in connection with a system, which, with some measure of success, I have been endeavoring to organize throughout the Dominion.

I have now the honor to acquaint you that, in compliance with the suggestion which you were pleased to make, I have prepared a list of more than forty lighthouses, from which, with your permission, I propose to select from twenty to thirty as stations to which meteorological instruments may be furnished.

In making the selections, I shall be guided by the suitability of the persons in charge and the facilities of communication, matters about which Mr. Smith is now kindly seeking for information.

Although there will only be from twenty to thirty stations at which instruments will at first be needed, I think that all or nearly all the lighthouses might be had in requisition for keeping a record of the direction of the wind and its estimated force at certain hours, with miscellaneous notices of weather.

In consequence of the infrequency of communication, these stations would of course be unavailable for storm warnings, but their contributions in conjunction with analogous data from other stations would be most valuable in studying storms a year or so after their occurrence, and of testing predictions founded on data from accessible stations, and I believe that if tabulated in a suitable manner, they would be much prized on both sides of the Atlantic.

In the first year the only expense for the majority of stations would be the cost of about a quire of registered forms for each station, but I would endeavor to increase their efficiency by gradually introducing some inexpensive wind-gauges to supersede the method of judging the force by estimation.

For the lighthouses furnished with instruments of any kind, I consider that the sum of $200 for the purchase of instruments would be sufficient for the first year, and it is probable that a smaller sum in each of the few subsequent years would suffice for their maintenance, and for the gradual extension which the future may show to be desirable. Thanking you for the encouragement which you have given to me in this matter,

I remain, &c.,
(Signed,) G. T. KINGSTON.

(No. 6.—Copy.)

THE DEPUTY OF MINISTER OF MARINE AND FISHERIES TO PROFESSOR KINGSTON, TORONTO.

OTTAWA, 24th March, 1871.

SIR,—I beg to inform you that the sum of $5000 has been placed in the estimates for meteorological observations with a view of ultimately establishing storm-signals, and I have to request you to favor me with a report, for the information of the Minister of Marine and Fisheries, giving an outline of the scheme you propose to put in operation; describing the objects you have in view, and stating the amount you propose to expend, and the manner in which you propose to expend it.

I am, &c.,
(Signed,) WM. SMITH,
Deputy of Minister of Marine, &c.

(No. 7.—Copy.)

PROFESSOR KINGSTON TO THE DEPUTY OF THE MINISTER OF MARINE AND FISHERIES.

MAGNETIC OBSERVATORY,
TORONTO, 31st March, 1871.

SIR,—In reply to your letter of March 24th (received on the 29th), acquainting me that $5,000 had been placed in the estimates for meteorological observations, and requesting a statement, for the information of the Minister of Marine and Fisheries, as to the scheme proposed, and the mode of expending the appropriation, I have the honor to enclose the accompanying memorandum.

I have, &c.,
(Signed,) G. T. KINGSTON.

(Copy, Enclosure.)

MAGNETIC OBSERVATORY,
TORONTO, March 31st, 1871.

Memorandum relative to a proposed Meteorological organization in British North America.

General description of the objects proposed, and of the organization that will be eventually needed.

Objects.

I. To collect climatological statistics.
II. To give practical application to the principles founded on data so collected, and more particularly by giving notice by telegraph of actual and of expected weather.

Agencies needed to effect the objects above named:—

I. A meteorological office.
II. A few chief stations in each Province.
III. Several telegraph stations.
IV. A large number of ordinary stations.

The several agencies considered separately.

I. *Meteorological Office.*—Its functions and financial support.

Functions.—To select and superintend formation of new stations. To select and distribute instruments and issue forms of registration. To exercise supervision over all stations by visitation and correspondence. To receive, scrutinize and compile returns, and issue such publications as may be advisable. Eventually to receive telegraphic messages, and to issue daily bulletins and special warnings of expected storms.

Financial Support.—The whole cost of the central office to be borne by the Dominion.

II. *Chief Stations.*—Their functions, number, and financial support.

Functions.—What I have named chief stations are those at which observations of all the elements are made day and night, for several years, at equal intervals not exceeding three hours, for the purpose of determining certain constant numbers which are needed for the reduction of observations made at other stations. The instruments should be of a first-class character, and eventually apparatus for photographic registration should be introduced. An essential feature also in chief stations is *the length of their duration.* This favors the selection of those places at which good observations have been carried on already continuously for several years, and also furnishes an argument for their permanence not being left wholly dependent on individual liberality.

Their Number.—There should be at least one in Nova Scotia, one in New Brunswick, two in Quebec, two in Ontario, one in Manitoba, and two in intervening regions.

Financial Support.—When it is desired to plant a chief station in a remote region, where no suitable private observer resides, or where there is no institution that can be utilized for the purpose, it should be supported *wholly* by Dominion funds, but if in the locality fixed on there be a good private observer actually at work, or an institution supported by academic or provincial funds, and suitable for the purpose, and of which the officers manifest a sufficient interest in the object, the observations, or rather the additional observations, might be secured by a moderate subsidy. The subsidy would vary in amount according to circumstances, and need not be regarded in the light of a grant to the Institution as *such*, and as establishing a precedent for similar grants to similar institutions which do *not* perform or desire to perform the special duty, but simply as a payment or a partial payment for services rendered.

III. *Telegraph Stations.*—For these stations, the nature of whose functions are expressed by their name, very expensive instruments are not required. The observations need not be so frequent as in the case of chief stations, and permanence is not so essential. Several railway operators are employed gratuitously in making observations in connection with Toronto, and it is probable that among these, and others in the same capacity, observers might be found who would be willing, when required, to keep up telegraphic correspondence with Toronto, on receiving a moderate gratuity, which would be derived of course from Dominion funds.

As a matter of course the *chief* stations would be in telegraphic communication.

Ordinary Stations.—Functions, number and financial support.

Functions.—The stations may be conveniently arranged in four sub-classes :—

a. Stations where rain and snow only are recorded.

b. Where temperature also is observed.

c. Where, in addition to the foregoing, a record is kept of the extremes of temperature, of cloud, wind and miscellaneous phenomena.

d. Where all the ordinary observations are made at least three times a day, and which differ from the chief stations, partly because the observations are not so frequent, and also, because for these *permanence* is not so essential, and need not be secured by payment.

Number.—Of sub-class (*a*) there can hardly be too many. If it were practicable, one of these might be placed on every ten miles square, and for every five of these I would place a station (*b.*), and sometimes a station (*c.*) or (*d.*), but it would be premature to lay down any precise rule as to number.

Financial Support.—The observers would be usually unpaid, or rather not in the pay of the Dominion, though exceptions might be made in the case of remote regions, where qualified persons are rare, and where it might be difficult to obtain those who would take up such pursuits from inclination. To a great extent also the observers at ordinary stations would work with instruments supplied at their own cost ; but it would be frequently expedient to lend instruments to them on condition of adherence to the regulations of the central office.

The cost of supplying a (rain) station (*a*) would be.....						$	2 50
„	„	a station (*b.*), including thermometer shed					8 00
„	„	„	(*c.*),	„	„	„	25 00
„	„	„	(*d.*).....				100 to 150

If the outer thermometer sheds be furnished the cost would be from $6.00 to $8.00 in addition.

The organization to be developed gradually.

The scheme, of which the preceding is a sketch, should be formed gradually, and in such a way that private voluntary effort, though stimulated, should not be superseded by state action, and that all concerned in it may be educated to their work by actual experience. This is true respecting storm warnings, for issuing which we are not yet prepared, although in another year, and to a limited extent, telegraphic daily reports of existing weather might be published.

In accordance with the opinion just expressed and with a view to a more perfect system hereafter, certain temporary arrangements have been set in operation, and which might be greatly promoted by pecuniary aid in the manner to be hereafter described. And here I take occasion to remark, that they should not only serve the designed purpose *directly*, by collecting meteorological data, but *indirectly* also, partly by training observers and partly also by revealing their comparative suitability for greater responsibilities hereafter.

Temporary arrangements based on the supposition that the appropriation is $5,000.

As the probable cost of furnishing the lighthouse stations with instruments is $350, the balance available for the five Provinces will be $4,650.

It is proposed to divide this into five unequal portions, thus :—

For Nova Scotia.....	$930
New Brunswick.....	930
Quebec.....	1,030
Ontario.....	830
Manitoba.....	930

One portion, amounting to $430, will be expended in the same way for all the Provinces :—

Purchase of instruments to be lent to ordinary stations, with cost of fittings and of distribution	$200
Extra computation, &c., at headquarters	100
Printing register forms and instructions, publishing, &c	100
Contingencies	30

The disposal of the other portions will be as follows :—

Nova Scotia.—Mr. Allison, Superintendent at Halifax, for improving instruments, appliances, &c., $100 ; to enable him to procure assistance needed in observing at three hours interval, $400	500
New Brunswick.—Mr. Murdoch, Superintendent at St. John, the same as at Halifax	500
Province of Quebec.—Dr. Smallwood, at Montreal, for assistance to carry on observations partially at three hours interval	250
Captain Ashe, at Quebec, the same	250
Instruments between Montreal and Quebec according to need of each	100
	$600

Ontario.—The reduction on the Ontario share, consequent on the addition to that of Quebec, prevents the establishment of any chief stations in that Province. I propose therefore to expend a portion of the $400 in aiding a station at which an important portion of the duties are now conducted gratuitously. I propose to expend another portion in bringing gradually forward as telegraph stations two points on railways, where the work is gratuitously, and as far as it goes, very efficiently done, and the remainder in promoting the establishment of stations in the outskirts of Ontario.

Manitoba.—It is probable that the efficient furnishing of a chief station, taking into account the cost of transportation and necessary erections where labour is scarce, would absorb too much of $500 to leave enough to cover the cost of frequent observations in the first year, and hence unless funds from other sources be available, it would be necessary in the first year to restrict the observation to three or four daily.

With respect to instruments for general service in Manitoba, although the number of available stations would be less than in the older Provinces, the cost of supplying each would be greater, on account of carriage ; and also because few persons would be found even partially supplied with instruments.

Remarks on the Temporary Scheme.

As respects the purchase of instruments, I think it would be extremely undesirable that the money designed for this purpose should be handed over to the respective Provinces, or to individuals residing there. The instruments should be regarded as the property of the Department at Ottawa, to which the Meteorological Office is attached, and should be purchased and distributed under the general orders of that Department by one officer. In every case when an instrument was lent, a receipt to that effect should be given, in which the true ownership is stated, and, I propose that the borrower should be allowed to purchase, at a price named in the receipt, and with a reduction of a certain rate per cent for *each year* in which he had sent in approved returns.

It would not be expedient to supply instruments to beginners beyond those named for sub-class (*b*), more expensive instruments being reserved for observers, who have been some time at work, and who show capacity for using them, and also for observers who

had already partially supplied themselves at their own cost. Seeing that from $100 to $150 is needed for a first-class ordinary station, the $200 would soon be absorbed without such a restriction.

The money designed for aiding observers at the chief stations might be paid directly to those at Halifax, St. John, Montreal and Quebec. For Ontario since the $300 is to be divided, it might be placed at my disposal, or it might be paid by the Department on my certificate or through my requisition.

The case of Manitoba is exceptional, and will need special enquiry.

As regards the appropriation for computation, printing, publishing, &c., it might be placed at my disposal as a whole, or it might be paid to me from time to time on requisition, vouchers of course being given certifying to its proper expenditure.

In naming $400 for observations at a chief station, I have assumed that the grant was designed for all the Provinces. But for this, I would have proposed a larger sum for the chief stations at Halifax and St. John.

If the superintendent be also head of the institution, having trustworthy subordinates at command, and whose duties require them to be up at night, the work might be done at the cost of a trifling gratuity to each observer; but where the superintendent is a private person, who must either take all the observations himself, or pay for assistance, $400 is about the lowest sum that could be offered to secure permanence, and it would only do this when the observer, as in the case of Mr. Allison and Mr. Murdoch, was deeply interested in the success of the undertaking.

The above is respectfully submitted.

(Signed,) G. T. Kingston.

(No. 8.—Copy.)

Professor Kingston to the Hon. P. Mitchell.

Magnetic Observatory,
Toronto, 25th April, 1871.

Sir,—In reply to a letter from Mr. Smith (March 24th) informing me that $5,000 had been placed in the estimates to aid the extension of the present meteorological system, and requesting me to express my views regarding the mode of employing the grant, I wrote a memorandum on the subject, dated 31st March.

I have now the honor to request that you will be pleased to give me information on the following points:—

1. Is it intended by the Government that I should take part in extending the system, which, with the aid of its friends, I have already inaugurated?

2. In such a case, to what Department am I to look for necessary authority?

3. Assuming that it is the Department of Marine and Fisheries, may I venture to ask whether the suggestions offered by me have received your approbation, and whether I may be permitted forthwith to prepare for speedy action?

While submitting this matter to your consideration, I beg leave to offer the following remarks:—

It conduces greatly to the truth of final results to have the instruments tested at headquarters before they are issued. The testing takes time, and, if possible, should be done both in hot and in cold weather.

Thermometers change their condition when new, and a considerable number therefore should be procured in *advance* to be kept at headquarters for at least one year, or till their final condition has been reached.

Instrument makers are more careful to supply good instruments, when they know that they will be tested by experienced persons. Reduction will be made in the first cost of the instruments when imported through one channel, and the cost of freight will also be less.

There are many appliances connected with the observations which cannot usually be purchased when required, and which must be made in advance.

Anticipating the demand, and having experienced the inconvenience of being suddenly called on to procure instruments, I have ordered a few thermometers, in addition to some now ready, for lighthouse service. I have also employed a workman for several weeks in constructing a large number of thermometer screens—contrivances very useful, and which cannot be purchased; and also, in making and packing the portable thermometer sheds for the lighthouses, as well as in making by contract a large number of rain-gauges for the lighthouses and other stations. I have also been under the necessity of printing a supply of register forms.

The above named preparations, in justice to the progress of the enterprize, I am compelled to make, although at my own risk, and I was persuaded that without this preparation there would be either a serious delay or an evil of greater magnitude—a hasty recourse to inefficient tools.

I have therefore to request that you will be pleased to place me in a position to meet the expenses, which, in regard to the well-being of the organization has obliged me to incur, and also to give your sanction for my procuring and distributing such instruments and register forms as may be necessary; stating at the same time the extent as regards cost to which I am free to go. To meet my present needs $400 would be sufficient, but I urgently advise that no time be lost in ordering the greater part of the instruments that may be required for lending.

With reference to my memorandum of 31st March, I earnestly hope that should any parts of it be apparently open to objection, they must not be hastily set aside. Regard to brevity induced me to limit my statement to a mere outline of the scheme, but I have thought out the details with great care, and am prepared to give ample explanations should you think fit to give me an opportunity of doing so. Regarding one part of the proposed expenditure, I will anticipate an explanation. I refer to $100 from each Province, or $500 in all, to aid computation at headquarters.

This certainly ought not to be looked on as an increase to the cost of the Toronto Observatory, as it will be expended on the observations from other stations, and also at a very economical rate, since the superintendence—usually the most expensive part—is gratuitous.

An important collateral purpose to be answered by part of this $500 will be that of supporting temporary assistants, who may qualify themselves at Toronto for taking part in the work at other stations.

Respectfully offering the foregoing remarks to your favourable consideration.

I have, &c.,
(Signed,) G. T. Kingston.

(No. 9.—Copy.)

Professor Kingston to the Deputy of Minister of Marine and Fisheries.

Magnetic Observatory,
Toronto, 6th May, 1871.

Sir,—I have the honor to enclose a list of lighthouses, which, with the approval of the Minister of Marine, I intend to employ as meteorological stations.

I propose that at all the stations a record be kept of the direction and force of the wind, the amount of cloud, and the general state of the weather. To some of them I propose that rain-gauges be sent, and that a few of these latter stations be also provided with thermometers.

By limiting the number of instruments, till the reports from observers shall enable me to test their capabilities, risk of loss will be lessened, while valuable materials may at the same time be gathered even without the aid of instruments.

In making the selection I have been guided partly by geographical considerations, and much also by the opinions of the superintendents of the districts.

As the superintendent for New Brunswick expresses opinions not favorable to the capacity of the lightkeepers, excepting in the case of the keeper of the Grindstone. I have put Grindstone in Class *A*, and the others in Class *C*.

As the officers of the Trinity House give no opinion respecting the capabilities of the keepers, I have, therefore, thought it imprudent to furnish instruments to many stations in the Province of Quebec, and in the list now sent I have been compelled to exclude those who are unacquainted with the English language. As soon as time will allow, register forms and instructions will be prepared in the French language, and, if it be not too late in the season, arrangements will then be made for providing instruments to some other lighthouses in the Quebec District.

The instruments to be furnished to the three classes of stations marked respectively *A*, *B*, *C*, will be as follows :—

A. Rain-gauge and measure. Thermometer. Thermometer screen (a small safe, formed of *louvres*, to guard the instruments from radiation). Portable shed, to keep off rain and early and late sun. The shed is about two feet each way, and is made in separate parts for the convenience of packing, but it can be put together easily in a few minutes. A small rough model of the shed is sent with it, in order that the observer may see the mode of putting it together and placing it.

B. Rain-gauge and measure.

C. No instruments.

The packages to be sent to the different stations will be as follows :—

A. One box containing instruments, thermometer screen and stationery, measuring 18x13x10 inches. One package containing portable thermometer shed, measuring 29x29x7 inches.

B. One box containing rain-gauge, &c., and stationery, measuring 18x8x8 inches.

C. One box containing stationery, measuring $18x4\frac{1}{2}x4\frac{1}{2}$ inches.

Stationery.

The regular annual supply to each station will be two register books, each sufficient to hold the ordinary observations of rather more than six months, and intended for service in the next year commencing January 1st. Printed instructions bound up in each register, and half a quire of forms suited for extra records in stormy weather.

In the first instance further provision will be made for the last six months of the year in which the record was commenced ; and in order to afford opportunity for correcting faulty practices at the commencement of the observations, I propose that the earlier observations be copied by the observer on loose forms, and be sent by mail or otherwise, to the Marine Department, or (if it be thought better) to myself.

The arrangements for equipping the several stations are complete, with the exception of the printed instructions. The instructions of a strictly scientific kind are in the press, but there are some others, which I would issue on my own responsibility, if they were ostensibly from myself, but which, as they will be supposed by the lightkeepers to emanate from the Department of Marine, should be submitted, I conceive, to that Department for approval or modification before they are printed.

I send a copy of the passage to which I refer, and request that you will let me know what alterations, if any, are needed, in order that the printing may be completed without delay.

As I shall be ready in a few days to send off the instruments, I have to request that you will give me information on the following points :—

What are the names and addresses of the agents to whom the packages should be consigned ?

Will the names of the stations as they are given in the first columns of the last annual report, be sufficient addresses for the packages, provided that they be sent to the care of the agents ?

Should the packages be sent to the agents through the ordinary channels of traffic, or are there special conveyances from Toronto at the command of the Department ?

At what dates should the packages be in the possession of the agents in each district?

Would it be practicable for some of the agents who visit the lighthouses, to meet myself, or one of my assistants here, or at Quebec, or at some other place? If I were placed in communication with the visiting agents, I might arrange such meetings, or, if that were not possible, I might convey to them in writing certain details which could not be properly included in the printed instructions.

Waiting your replies to the foregoing questions.

I have, &c.,

(Signed,) G. T. KINGSTON.

(Copy, Enclosure.)

Copy of certain passages in the Instructions to Observers to which reference has been made in the accompanying letter.

This book is sufficient for registering the observations of rather more than half a year. A new book should be commenced on the 1st of January, and another, if possible, on the first of July; and two half yearly books, namely, one ending on the 31st of December, and the other commencing on the 1st of January, should be sent to the Department of Marine and Fisheries, when the first visit after the first of July is made to the station.

If the time of the visit be before the first of July, and no suitable opportunity for returning the book is likely to occur afterwards, the book should be returned *then*, and another brought into use.

Two new books will usually be sent each year for service in the following year, but at the time when the observations are first brought or introduced, a third book will be sent for service in the last six months of the current year.

A few loose papers are provided on which the lightkeepers are requested (?) to copy the first few pages of their register book. Each paper must be sent to the Department of Marine and Fisheries as soon as possible after it has been filled in.

If any lightkeeper wishes to keep a second copy of his observations for his own use, he may obtain register books for that purpose by making application to the Department of Marine and Fisheries.

The register books are intended for observations made with the thermometer and the rain-gauge, as well as for other observations for which no instruments are needed.

In the first instance only a few stations will be provided with rain-gauges, and a still smaller number with thermometers. At stations unprovided with thermometers, column 3 must be left blank, and column 2 as well as column 3 must be left blank when neither rain-gauge nor thermometer is provided.

No observations need be taken on Sunday, but the depth of rain and snow must be registered as on other days.

LIST OF LIGHTHOUSES AT WHICH IT IS AT PRESENT PROPOSED THAT A RECORD OF THE WEATHER BE KEPT.

Class A includes Stations supplied with Thermometers, Thermometer Shades, &c., and Rain-gauges.
Class B includes Stations supplied with Rain-gauges only.
Class C includes Stations at which records are made which do not need the assistance of instruments.
The Stations in each class are arranged in the order in which they stand in the Report of the Honorable the Minister of Marine and Fisheries, for the year ending June, 1870, and bear the names given in the first column of the Report.
The numbers in the second and third columns for each class in the following list refer respectively to the page of the Report, and to the position on the page, reckoning from the top.

Class A.			Class B.			Class C.		
Name.	Page.	Position.	Name.	Page.	Position.	Name.	Page.	Position.
Cape Rosier	172	10	Belle Isle	172	1	Outer Drake, Lake Ontario	184	6
Anticosti, S. W. Point	174	2	Amour Point	172	2	Griffith Island	188	7
Father Point	174	7	Snake Island	184	3	Nottawasaga Island	188	8
Pelee Island	186	17	Pigeon Island	184	5	Christian Island	188	11
Clapperton Island	190	3	Pelee Spit	186	18	Lonely Island	188	13
Liverpool	198	7	Amherstburg	188	1	Red Rock	188	15
Sable Cape	198	13	Point Clark	188	4	St. Ignace	190	5
Annapolis	202	3	Chantry Island	188	5	Miscou Island	190	7
Grindstone	204	1	Isle of Coves, Georgian Bay	188	6	Escuminac Point	190	14
			Sulphur Island	190	4	North Canso	194	5
			Sea Wolf Island, C. B.	192	9	Sand Point	194	6
			Scatterie Island	194	1	Seal Island	200	3
			Canso Cape	196	1	Lepreau	204	5
			Beaver Island	196	3	Machias Island	206	2

MAGNETIC OBSERVATORY, TORONTO, May, 1871.

(Copy, Enclosure.)

List of Lighthouses in Nova Scotia District, to which Meteorological Instruments and Register Books were sent from the Toronto Observatory, May 22nd, 1871.

Each box or package is addressed to the name of the lighthouse as given in the first column of the list in the last annual report of the Hon. the Minister of Marine and Fisheries, and also to the care of H. W. Johnston, Esq., Agent of Department of Marine and Fisheries, Halifax and Nova Scotia, *via* Quebec and Pictou.

Lighthouse.	No. of Packages to each Station.	——
Liverpool	2	1 Portable thermometer shed, in package, measuring 29x29x7 inches. Box containing instruments and registers, measuring 18x13x10 inches.
Sable Island	2	Same as preceding.
Annapolis	2	Same as preceding.
Sea Wolf or Margaree	1	Box containing rain-gauge, and registers, measuring 18x8x8 inches.
Scatterie	1	Same as preceding.
Canso Cape	1	Same as preceding.
Beaver Island	1	Same as preceding.
North Canso	1	Box containing register book, measuring 18x4½x4½.
Sand Point	1	Same as preceding.
Seal Island	1	Same as preceding.

The last named boxes are connected by battens which can be removed after the packages have been received by the agent.

(Copy, Enclosure.)

List of Lighthouses in New Brunswick District, to which Meteorological Instruments and Register Books were sent from the Toronto Observatory, May 22nd, 1871.

Each box or package is addressed to the name of the Lighthouse as given in the first column of the list in the last annual report of the Hon. the Minister of Marine and Fisheries, and also to the care of G. W. Smith, Esq., Agent for Department of Marine and Fisheries, St. John, New Brunswick, *via* Quebec and Shediac.

Lighthouse.	No. of Packages to each Station.	——
Grindstone	2	1 Portable thermometer shed, in a package measuring 29x29x7 inches. 1 box containing instruments andregisters, and maesuring 18x13x10.
Machias	1	A Box containing register books, measuring 18x4½x4½ inchse.
Lepreau	1	
Escuminac	1	
Miscou Island	1	

The four latter small boxes are connected by battens which can be removed after the packages have been received by the agent.

(No. 10.—Copy.)

THE DEPT. OF MARINE AND FISHERIES TO MR. KINGSTON.

OTTAWA, May 16th, 1871.

SIR,—Referring to your letter of the 31st March last, enclosing outline of scheme recommended, in reference to meteorological observations, and also to your letter of the 25th ultimo, addressed to the Minister of Marine and Fisheries, requesting information on certain points; I beg to state, that under an Order in Council of the 1st instant, your proposed scheme of expenditure has been approved, and this Department has been authorized to make the necessary arrangements to carry out the intentions of Parliament in connection with this branch of the Public Service, and expenditure of the appropriation of certain portion of the $5,000 has been placed under the control of this Department. I have, therefore, to request that you will proceed with your arrangements for carrying out the scheme submitted to the Department, for extending the system which you have already inaugurated. You will please advise me as to the funds which you at present require for this purpose, from time to time; you will please make requisitions, specifying the amount and the particular object for which it is required. The steamers *Napoleon* and *Druid* will leave Quebec on the 7th July next, for the lights in the River and Gulf of St. Lawrence below Quebec, so that the instruments you propose sending to the light stations will require to be ready by that time.

With reference to your letter dated 6th instant, enclosing list of lighthouses which you intend to employ as meteorological stations, I have to observe that the Department is of opinion that Belle Isle, at the eastern end of the Straits of Belle Isle; Sable Island, one hundred miles to the south-east of Halifax; and Bird Rock, in the Gulf of St. Lawrence, are all first-class stations, and in most prominent positions, and should, by all means, be in class A. With reference to the copy enclosed by you, of certain passages in the instructions to observers, the Department is not aware of any alterations necessary, and is of opinion that these instructions should be all signed by you, and forwarded by this Department to the observers, with directions to carry them out.

The name of our agent at Quebec is J. N. Gregory, Esq.; at Halifax, H. W. Johnston, Esq.; and at St. John, N.B., George W. Smith, Esq., all agents, Marine and Fisheries Department.

The name of the lighthouses, as contained in the first column of the last annual report, will be sufficient, giving the District also, and send them to the care of the agents. The Department has no special conveyances from Toronto at its command, and the packages should therefore be sent through the ordinary channels of conveyance; those for Halifax *via* Quebec and Pictou, and those for St. John *via* Quebec and Shediac. The packages for the Quebec District and the Gulf should be in the possession of the agent by the 3rd July next; at Halifax and St. John as soon as they can possibly be sent. All the packages for lighthouses above Toronto, such as Pelee Island, Clapperton Island, Pelee Spit, Amherstburgh, Point Clark, Chantry Island, Isle of Coves, Sulphur Island, Griffith Island, Nottawasaga Island, Christian Island, Lonely Island, Red Rock and St. Ignace, should either be sent to the lighthouse keeper at Gibraltar Point, at the entrance of Toronto Harbor, or to Kingston, which ever is cheapest and most convenient; addressed to the Superintendent of the Lighthouses in Ontario, previous to the 2nd July, when the supply steamer could take them up with her. If you decide to send them to Gibraltar Point Lighthouse, I will direct the lighthouse keeper there to place himself in communication with you, and take charge of them.

Those for Snake Island, Pigeon Island, and Outer Drake, can be sent to Kingston, in care of Darius Smith, Acting Superintendent of Lighthouses, Kingston, as soon as you have them ready, and when you have advised me of your plans, I will advise these parties, and direct them to be looking out for the packages. As the Superintendent of Lighthouses in Ontario is a new man, whom I do not know and have never seen, and not a

scientific man, I do not think it would be advisable to incur the expense of sending him to Toronto at present. His name is Isaac Hope, Kingston, but he is not employed by this Department yet, and is not under pay.

The Acting Superintendent, Mr. Darius Smith, of Westbrook, near Kingston, is an intelligent person, and a mechanic, and it is intended that he should visit the Lighthouses in Ontario this year, in company with the new Superintendent, and it is possible that he may have an opportunity of calling and seeing you in Toronto before the annual visit takes place, but I think it advisable that you should give all your explanations and instructions in the printed documents.

I am, &c.,
(Signed,) Wm. Smith,
Deputy of Minister of Marine, &c.

(No. 11.—Copy.)

Professor Kingston to the Deputy of the Minister of Marine and Fisheries.

Magnetic Observatory, Toronto, 19th May, 1871.

Sir,—I have to acknowledge yours of May 16th, acquainting me that my scheme of expending Parliamentary grant for Meteorology had been approved by Order in Council, and requesting me to state what funds I required at present to carry out the scheme; and also, giving me sundry information relative to lighthouses.

I need at present the sum of five hundred dollars ($500). The precise amount devoted to each purpose will be given by me with vouchers at the end of the present quarter, but in the meanwhile I give the following approximate estimate of the manner in which the money will be expended:—

For construction of rain-gauges, thermometer screens, thermometer portable sheds, packing cases, &c	$250 00
Payment for instruments received or shortly expected.....	150 00
Extra writing and compilation.....	50 00
Miscellaneous, including cost of distributing instruments.....	50 00
	$500 00

I do not give the cost of printing register books, as only a portion of it is completed, and there is no need for immediate payment.

As regards the lighthouses which you mention as fit to be in Class A, I have placed Belle Isle, Sable Island and Bird Rock in that class.

In my list Belle Isle was in Class B, because the agent stated that the keeper was a boatman, and that his qualifications were unknown. My design, with regard to most places, is to test the capabilities of the observer, by supplying them at a *moderate* cost, and then to increase the expenditure when they are found worthy. I did not include Bird Rock, because I understood that it was very difficult of access.

I included Sable Island to be on the list of Class A, but as I could not find that name in the annual report, I supposed that the agent in recommending Sable Island referred to what appeared in the the report as *Cape* Sable.

I trust that on Tuesday next I shall send off all the apparatus for New Brunswick and Nova Scotia.

The instructions are stitched up in the register books, but there will be also a printed circular sent to the lightkeepers, copies of which, addressed to each man, will be forwarded to you in order to receive the endorsement and authority of the Department.

I have, &c.,
(Signed,) G. T. Kingston.

(No. 12.—Copy.)

PROFESSOR KINGSTON TO THE DEPUTY OF THE MINISTER OF MARINE AND FISHERIES

MAGNETIC OBSERVATORY,
TORONTO, 23rd May, 1871.

SIR,—In reply to yours of 18th inst., enclosing copy of letter from Mr. Allison, dated May 1st, I shall take up the several points of his letter in order.

A station very near the sea, though suited for meteorological observations, is in an *exceptional* condition, and therefore, not well adapted for a *chief* station, which should be representative and typical of the region for whose benefit it chiefly exists. I therefore think that some such site as that which Mr. A. recommends should be chosen ; I think, however, that the residence of the superintendent, if he takes part in the routine work (as he must in the present state of things), ought to be very near the locality of the instruments.

Magnetic Instruments.—There are two clases of magnetic observations :—I. Those by which the *absolute* values of the elements are found ; and II. The differential observations.

I. Requires the attention of the observer for only a part of two or three days in each month. For a portion of these observations, *i. e.*, the determination of the declination, or popularly, the variation of the compass, there is *very great need*, considerable care and skill now required to take the observations properly, but might be acquired by an intelligent man, and the reductions could be done by us. The buildings need not cost more than from $100 to $200. A position should be chosen from which there is a *distant* and *well defined* object in view that is not *likely to be built out.* Before steps are taken in this matter, it would be advisable to enquire for details from me, as much useless expenditure would be avoided.

II. The differential observations require a large amount of personal attendance and experience, and the apparatus whether for eye observations or photography as well as the buildings are expensive. There is, moreover, no need for such in Halifax. Observations of this sort started at Cambridge, U. S., were found to be mere reproductions of those at Toronto, and were discontinued in consequence. I beg to notice in connection with this, that magnetic instruments should not be purchased with money designed for meteorology, which is a distinct science.

Time Ball.—I consider that a time ball apparatus should be in every large seaport, but there is no need for the transit to be near it. The mast of course should be in sight of the shipping, whereas the telescope and clock would be more conveniently placed elsewhere. It would be a great saving of expense if the ball were dropped by Captain Ashe, and the cost of the transit and clock or part of the cost employed in the purchase of an anemograph. These instruments should be eventually furnished to all the chief stations, but the cost ($350) besides support, &c., is too high for present grant. The fact that Mr. Allison's observations extend over nearly five years is an argument in favor of a site near his present one, as continuity is of great importance.

As regards furnishing the chief stations under Mr. Allison with instruments, when I named $400 for the superintendent and $100 to improve instrumental arrangements, I supposed that he would continue a private person, and that his former instruments would remain his own property, and that $100 would be given him to help in his most pressing need.

Now, if each Province is to have an average of $500 for chief stations, it is evident the Government cannot pay Mr. Allison the cost of his instruments, and add to them besides, and give him even a salary of $400. If, however, the time ball money be united with that for meteorology, a very efficient chief station might be supported. An assistant might hoist the ball, and either drop it by signal from Quebec or put the apparatus in gear for dropping it by electricity.

Duplicates of Instruments.—This is necessary for thermometers, but it would be too expensive (at the outset at least) to have duplicate barometers unless the second be an inferior one.

Cost of Register Books.—It is more economical to have these printed at the central office. I have printed forms sufficient to supply all the chief stations for two years, and here I would remark, if any chief stations are established, it would be well that the superintendents be informed of the preparations made for them by me, and that they be directed to confer with me on other subjects, as the interests of the whole scheme would be thereby promoted, and the funds of each station would be more available for other uses. For small stationery, &c., small sums would be needed, and (say) $10 annually for postage.

Printing.—The final results should be printed at head-quarters, as they are vastly more valuable when those from different stations are printed on the same page. Printing occasional papers by superintendents would, perhaps, increase the interests of the neighborhood in the subject, but it would not be well to spend much in this way. I would suggest that (say) $50 be given for printing, postage and small stationery, leaving the superintendent to make the most of it, and to save what he could for other purposes in the same or other years. But over $50 could not be taken from the present appropriation, if all the Provinces be considered, or without diverting the money from the uses, in the interests of which it was voted.

I remain, &c.,
(Signed,) G. F. KINGSTON.

(No. 13.—Copy.)

THE DEPARTMENT OF MARINE AND FISHERIES TO MR. KINGSTON.

OTTAWA, 29th May, 1871.

SIR,—I have to acknowledge receipt of your letter of the 19th instant, with reference to the funds at present required for meteorological purposes, and the arrangements made to carry out your scheme. In reply I am to enclose herewith official cheque No.——on the Bank of Montreal, for the sum of $500, the amount at present required. I beg to state, also, that of the $5,000 voted by Parliament for this service, the sum of $4,000 only have been placed by Council at the disposal of this Department, and that it will be necessary for you to reconsider your proposed division of the funds, as you will only have $4,000 to dispose of instead of $5,000 as originally contemplated.

The department is desirous to allow Doctor Smallwood the sum of $500 per annum, for his services in connection with this subject, and I may add that he is now about to place himself in communication with the authorities at Washington, with the view of making public in Montreal the daily reports of weather given, and bringing into practical utility this branch of meteorological observations.

The Department does not think it necessary to pay any additional sum to Commander Ashe, at Quebec, as he is already in receipt of a good salary from the Government for his services, and it will inform him that it expects him to contribute the additional information required without further remuneration. I have also to request that you will be kind enough to inform me whether you could arrange to place yourself in communication with Washington, and have announcements as to expected weather, made in Toronto daily, similar to those proposed to be made by Doctor Smallwood, as the Department is of opinion that by so doing the subject of meteorological observations would be invested with interest, and its practical utility exhibited.

With reference to Sable Island not appearing on the list of lights, I beg to inform you that the reason for this is, no light is exhibited on Sable Island; but it is expected ere long to have two lights on the island, one at the east end and the other at the west end, and also to place a fog whistle in the centre of the island. There is, however, and has been for many years back, a humane establishment in existence on this island, consisting of a superintendent and fifteen men, whose duty it is to save life and property. The snperintendent is well qualified to attend to observations.

The circulars have been received, and a letter has been appended to each, directing the lighthouse keeper to carry out your views.

I am, &c.,
(Signed,) WM. SMITH,
Deputy of Minister of Marine and Fisheries.

(No. 14.—Copy.)

THE DEPUTY OF MINISTER OF MARINE AND FISHERIES TO PROFESSOR KINGSTON.

OTTAWA, 7th June, 1871.

SIR,—I beg herewith to enclose for your information, letter with accompanying documents from Mr. A. Watson, of Washington, with reference to the establishment of storm and flood signals, and I have to request that after perusal you will return these papers, with any remarks you may have to make thereon.

I am, &c.,
(Signed,) WM. SMITH,
Deputy of Minister of Marine, &c.

(Copy, Enclosure,)

MR. A. WATSON, WASHINGTON, TO THE MINISTER OF MARINE, AGRICULTURE OR WAR.

WASHINGTON, D. C., June 2nd, 1871.

SIR,—I have seen it in the papers that the system of storm advertisements as established by Col. Myer, under the control of the War Department, was about to be extended to the Dominion of Canada. In my opinion this plan is of little or no value, while it is very expensive. The idea, that the "probable" weather, over a territory of 1,000 miles square, could be given in four lines, is simply impossible, and stamps the man as a charlatan, which he is well understood to be here; and the War Department as yet refuses to test my plan, which is so highly recommended by State and city officials; and lastly, by the highest officers in the navy and army. But this will be done soon, when the present plan is seen by all to be a costly failure. I offer you my plan in preference to that of Col. Myer.

Very respectfully,
(Signed,) A. WATSON,
220, 12th St.

(No. 15.—Copy.)

PROFESSOR KINGSTON TO THE DEPUTY OF THE MINISTER OF MARINE AND FISHERIES.

MAGNETIC OBSERVATORY,
TORONTO, CANADA,
7th June, 1871.

SIR,—I have the honor to acknowledge your letter of 29th May, which I found on my return to Toronto, and containing a cheque for $500.

With respect to weather signals by telegraph, I have to state, that in compliance with the desire verbally expressed to me by the Honorable P. Mitchell, I have opened a communication with the officer in charge of the Signal Department in Washington, and have suggested the outlines of a plan suited to the present conditions of our meteorological stations, and which can be extended hereafter. As soon as I have gained his consent, and the concurrence of the telegraph companies in the two countries, I shall be prepared to issue a code for expressing the messages.

The plan is briefly as follows:—

1. To collect each morning, at Toronto, the present conditions of weather at certain chief stations.

2. To transmit this information in a condensed form to Washington.

3. To receive from Washington a statement of probable conditions in certain specified regions during the 24 hours, commencing say 6 p. m.

4. To forward the opinions of coming weather to the districts concerned.

The cost of

1. Would be borne by the Dominion.
2. } Dominion and the
3. } United States.

4. By the Dominion as far as regards the stations from which the information was collected, but if other ports desire messages, the local authorities should bear the cost.

Notices at the ports, whether by placards or by hoisting signals, would also be made at the cost of the local authorities.

In the above scheme the responsibility of making forecasts is thrown on Washington, as our area of observation is too limited at *present* to allow of our attempting to do it in a satisfactory manner.

I have always had in view the eventful organization of weather signals as one of the most useful applications of meteorological science, and the course which I have been pursuing, at a moderate cost, would have placed Canada in a position to organize an efficient system in two or three years. As a means of exciting public attention, and as an act of compliance with public expectation, this premature movement may not be without its uses, *provided that none of the grant intended for meteorological purposes be devoted to its support*, but to divert any of the funds from the operations which are immediately necessary would be destructive to the enterprise.

I remain, &c,

(Signed,) G. T. Kingston.

(No. 16.—Copy.)

Professor Kingston to the Deputy of the Minister of Marine and Fisheries.

Magnetic Observatory,
Toronto, 13th June, 1871.

Sir,—I have to acknowledge your letter of June 7th, enclosing papers from a Mr. Watson, and which I return herewith.

The justice of the condemnation pronounced by Mr. Watson on the weather notices of the War Department of Washington depends much upon what that system pretends to accomplish. I do not consider that any person, occupying the position of the officer in charge, is able to give notice of the weather that will occur in each locality. All that he can do (in the present state of knowledge) and all that I presume he claims to do, amounts to his giving notice that there is an atmospheric disturbance *somewhere*, which may *possibly* reach the place to which the warning is sent. By issuing such a notice from the central office, local vigilance is roused, and *special local knowledge* of weather indications is brought into play by people on the spot, and the precise form of the danger is thus provided against.

In a centralized system, compilation and forecasting rests with the central office, while the mass of observers, as they need not possess any scientific acquirement, can be procured with comparatively little difficulty. In the plan of Mr. Watson, the responsibility is thrown upon the telegraph operator, who needs a much more cultivated intelligence than in the former case.

In Mr. Watson's plan, notice of a storm in the neighborhood may warn a farmer *not* to cut his hay, but the absence of the notice will not assure him that he *may* cut it with safety.

To give something approaching to the required security, a wide range of observation is needed, and it is that, that a central officer, viewing as it were the whole country, may predict a probable period of dry or calm weather, as well as any coming disturbance.

As regards the costliness of the army system of the United States, I have no doubt but that it is very costly, but I think also (unless it be supported by local funds) Mr. Watson's plan would be as costly. While in efficiency, if *taken alone*, it would be inferior to the army system, supposing the latter to be conducted on sound principles.

I consider that both plans might ultimately be brought into harmonious action under one management, when the work which I am striving to accomplish has had time to mature, but that it would be inexpedient to become committed in any way whatever to Mr. Watson, and that it would be wiser to let his scheme be put to trial in his own country.

I now take occasion to state that I have an answer from the signal officer at Washington, to the effect that he will cheerfully co-operate in exchanging weather intelligence, provided that we in Canada will send messages at three different hours—*Washington time.* To do this at Toronto will cause no difficulty that cannot easily be overcome, but I fear that it will give much additional labor at other stations.

The financial and telegraphing difficulty I apprehend will be a much greater one, and I must here repeat that it would be suicidal to divert to this purpose the money needed for those preliminary measures without which all telegraphy would be a delusion.

The United States army system is very new; in fact I consider if their operations had been privately rehearsed without publication for a year or so, it would eventually have been far more satisfactory than at present, and at any rate it would be wise policy for Canada to allow time for the further development of the system before becoming committed to any costly telegraphing arrangements.

In order to prepare for making application to the telegraph company, I shall at once enquire further regarding the length of the messages which it will be necessary to send. Should the application which the Honorable Mr. Mitchell proposes to make to the Montreal Telegraph Company be satisfactory, I will be ready to go on with the exchange of intelligence in September, after the completion of arrangements which necessitate my frequent absence from Toronto.

On the other hand, if the terms be too expensive, or if there be no funds from *other sources* to meet them, it will be necessary to postpone final terms with the Washington office.

I have, &c.

(Signed,) G. T. KINGSTON.

(No. 17.—Copy.)

DEPUTY MINISTER OF MARINE AND FISHERIES TO PROFESSOR KINGSTON.

OTTAWA, 16th June, 1871.

SIR,—I have to acknowledge receipt of your letter of the 8th inst., in reference to the proposed expenditure for meteorological observations.

In reply, I beg to inform you that the Department sanctions the proposed expenditure of $1,950 as stated in your letter, and that there is no objection to your opening communication with the Bishop of Rupert's Land.

I beg also to inform you that the Department will sanction the expenditure proposed to be made at Quebec, and Captain Ashe will be requested to co-operate with you to as great a degree as possible.

With reference to the establishment at Ottawa, I am to inform you it will be provided for out of the $1,000 remaining after the expenditure of $4,000 of the appropriation.

I have to request that you will inform me as to the stations you wish to be placed in communication with, and the Department will take the necessary steps in the matter.

I am, &c.,
(Signed,) Wm. Smith,
Deputy of the Minister of Marine, &c.

No. 18.—Copy.)

Professor Kingston to the Deputy of the Minister of Marine and Fisheries.

Toronto, 21st June, 1871.

Sir,—I have to acknowledge receipt of your letter of 16th June, acquainting me that the Department sanctions the expenditure of $1,950 in the manner proposed by me in my letter of 8th June, and also that I am authorized to communicate with the Bishop of Rupert's Land. I take for granted that this authority empowers me to state that the sum of $450 will be available if His Lordship will consent to see after its employment in accordance with the proposed scheme. The stations with which I desire the Department to place me in *official* communication are those only which are, or hereafter may be, supported or subsidized from public funds intended for meteorological purposes. As far as I am aware the only stations so circumstanced and at present in operation, are the following :—

Montreal, Superintendent, Dr. Smallwood.
Quebec „ Capt. Ashe, R.N.
St. John, N. B. „ G. Murdoch.
Halifax „ F. Allison.

I consider that the superintendents of these or of any stations receiving aid for meteorological purposes, should be required to take such observations, and at such hours as may be prescribed by me as the Director of the Central Office ; to transmit to me such periodical or occasional returns as may be demanded, and take counsel with me regarding the general arrangements of their stations, including the most advantageous employment of their grants for the purchase of instruments.

Should any other place or person receive public pecuniary aid for meteorological purposes, I conceive that the superintendent should be required to conform to the prescribed arrangements as a necessary condition for receiving his grant or subsidy. With respect to stations which do *not* receive subsidies from the public funds, as the connection between them and myself is a voluntary one—the only assistance which they receive being advice, blank forms, and in some cases the temporary use of instruments—I do not think it necessary for the Department to take any action with regard to them.

In conclusion, I request you to inform me whether Mr. Murdoch and Mr. Allison are appointed to superintend the stations at St. John and Halifax. I ask this because I purpose to visit New Brunswick and Nova Scotia in July and August, partly to make arrangements with those gentlemen regarding sundry details.

I have, &c.,
(Signed,) G. T. Kingston.

(No. 19.—Copy.)

Deputy of the Minister of Marine and Fisheries to Professor Kingston.

Ottawa, 22nd June, 1871.

Sir,—I beg herewith to enclose for your information, copy of letter received from

Doctor Jack, President of the University of New Brunswick, offering suggestions in reference to the carrying out of your proposed scheme of meteorological observations.

I am, &c.
(Signed,) Wm. Smith,
Deputy of the Minister of Marine, &c.

(Copy, Enclosure.)

Professor Jack to the Deputy of the Minister of Marine and Fisheries.

University of New Brunswick,
Fredericton, June 12th, 1871.

Sir,—In answer to your proposal, conveyed to me in your letter dated the 6th inst., to make Fredericton a chief station for taking meteorological and climatological observations for the Dominion, I have the honor to assure you that this University will willingly co-operate in any such work as is proposed, and employ a competent observer for the purpose.

From your letter I infer that the Department of Marine and Fisheries means to supply the requisite instruments for the stations. This is right, as it is very desirable that there should be as much uniformity in them as possible, in order that the results obtained may be compatible.

It is scarcely necessary for me to make any remarks on the important system of observations contemplated, as you have such competent men to consult as Professor Kingston and Dr. Smallwood. In my opinion the system should, as far as possible, be compatible to that of the Smithsonian Institution, which so extensively prevails on this continent. I beg to state that the barometers, especially for this place and the Maritime Provinces generally, should be graduated to some extent above 31 inches, so as to admit of reading by Vernier a little higher than 31—a height at which the barometer sometimes stands here. The thermometers, both the common and the dry and wet bulbs, should register as low as 30° below zero, if the Fahrenheit scale be employed. All the instruments too, previous to use, should be tested at the Kew Observatory, near London.

The lighthouse keepers would require some instructions for the proper placing and reading of the instruments, and should you think that my services could be turned to any useful account in this direction, you may command them. Such instructions might be given at the several lighthouses during my long summer vacation, or at any time at the University to such keepers as might find it convenient to attend.

This is a very busy season with me, as the Session is just drawing to a close, but on any point on which I can furnish information or advice, I shall be happy to do so.

I am, &c.
(Signed,) W. Brydone Jack.

(No. 20.—Copy.)

Professor Kingston to the Deputy of the Minister of Marine and Fisheries.

Toronto, 26th June, 1871.

Sir,—I have to acknowledge receipt of your letter of the 22nd June, enclosing a copy of one from Doctor Jack, President of Fredericton College.

It is gratifying to learn that a gentleman in his position is willing to give his attention to the advancement of meteorological science in this Dominion. His remarks are judicious, and accord, on the whole, with the views long held by myself. I am fully sensible of the advantages of the co-operation of the Kew Observatory, and, in fact, have myself frequently visited that establishment. and have been in correspondence with it for sixteen years. As regards the readiness of Doctor Jack to visit and instruct light keepers, I hold that one of the future functions of the superintendent of chief stations

will be to aid the central office by works of this kind. I think, however, that before I have fully organized the system, and have made the chief agents acquainted with my plans, it would lead to disorder if observers were to receive instructions from others than from myself, or persons deputed by me.

I consider that it would be desirable to furnish a good set of instruments *on loan* to Fredericton, on condition that the observations are taken at the prescribed hours, and that the returns are transmitted to me. If it be the intention of the Department to supply instruments *only*, and *not* to give a money grant, at present, for observations, it would be sufficient if the observations were made at the hours in use at first-class *ordinary* stations, viz., at 7 a.m., 2 p.m. and at 9 p.m., and it would then rest with Doctor Jack whether he could make it practically a chief station by employing gratuitous service, in order that the observations might be taken *at all* the hours required.

I consider that in accepting any grant for *observations*, Doctor Jack should bear in mind what is conveyed in the following remarks :—

To fulfil the purposes of *chief stations*, it is necessary to take the ordinary observations night and day, at equal intervals of three hours, and to continue them for a few years, with no interruption, unless it be on Sunday, Good Friday, and Christmas Day.

As $400 would probably be inadequate to keep up the *full* observations at these short intervals, unless paid service be largely supplemented by gratuitous service, it will be sufficient in the first year to confine these frequent observations to *temperature*.

As less skill is required for this than for some observations, it might be safe during part of the twenty-four hours, to employ watchmen or others, whose services might be secured at a lower remuneration.

In my judgment it would be inexpedient to make a money grant for observations on easier conditions than those which I have named.

Throughout England numerous members of the meteorological society observe three times every day, and report each month to their secretary, and not only do they not get paid but pay for the privileges of membership. In various parts of Canada I have correspondents working, in many instances, with their own instruments, who observe three times a day, and I fear that it may awaken expectations which could not be realized, if observations, in no respect superior to their own, were to be rewarded with public grants.

Doctor Jack speaks of procuring an observer. Now it is impossible for all the observations to be taken by *one* observer, although the whole time of any one man is not needed. The proper course would be, first, to appoint some college officer to the general oversight, and to take such a portion of the work as he finds compatible with his duties ; and, second, to employ *part* of the time of two or three persons for the remaining observations.

When three assistants have received anything like suitable compensation, much will not be left for the superintendent.

This, therefore, for the present at least, must be a nearly gratuitous service. I trust that the time will come when a definite allowance will be given to the superintendents of the chief stations apart from that to be paid to assistants. In nearly every case, however, it would be for his partial services, as his income must naturally come from other sources.

In connection with the above remarks, I may state that at the Observatories in England,—correspondence with the Meteorological Office, and which are analogous to the proposed chief stations in Canada,—the annual allowance is nearly, if not entirely, spent in paying the assistants, and in the current expenses, little or nothing being left for the superintendent.

The only exception is a remote station where it is necessary to *maintain* a superintendent, because no suitable person was found on the spot.

If you will inform me as to the footing on which it is intended to place Fredericton financially, and will also make Doctor Jack acquainted with the relation in which he is to stand with me, I will endeavour to call on him, and make arrangements regarding the future.

I have, &c.,
(Signed,) G. T. KINGSTON.

(No. 21.—Copy.)

DEPUTY OF MINISTER OF MARINE AND FISHERIES TO PROFESSOR KINGSTON.

OTTAWA, 4th Sept., 1871.

SIR,—Referring to your letters of the 26th June and 11th July last, in reference to Fredericton as a station for meteorological observations, I have to request that you will inform me whether you have visited Dr. Jack, and if so, whether you have made any arrangements with him as to the description and nature of the observations you wish him to make at that place.

I have also to request that you will favor me with your opinion as to the remuneration you think should be allowed for the meteorological service at this station.

I am, &c.,
(Signed,) WM. SMITH,
Deputy of Minister of Marine, &c.

(No. 22.—Copy.)

THE DEPUTY OF MINSTER OF MARINE AND FISHERIES TO PROFESSOR KINGSTON.

OTTAWA, 13th Sept., 1871.

SIR,—This Department has received a letter from Professor Jack, of the Fredericton University, dated 5th instant, in which he states that he learned from you, when you were at Fredericton, that you had already appropriated all the money at your disposal in subsidizing other stations, and that you had none left for the University at that place.

I have to request that you will inform me if there was not $400 left while making with me the proposed division of the $5,000 voted for meteorological purposes, as Professor Jack is anxious to get share of the grant, not that it may benefit him individually, but so as to enable him to pay for such assistance as he will require at his station. I have also to request that you will inform me upon what footing you propose to place Fredericton with reference to meteorological observations.

I am, &c.,
(Signed,) WM. SMITH,
Deputy of Minister of Marine.

(No. 23.—Copy.)

PROFESSOR KINGSTON TO THE DEPUTY OF MINISTER OF MARINE AND FISHERIES.

TORONTO, 16th September, 1871.

SIR,—I have to acknowledge your letters dated September 4th and 13th, the former received on my return to Toronto, and the other received yesterday.

In reply to the first, I have to state that I recently visited Fredericton, and was much impressed with its suitability for a chief meteorological station. I also had several conversations with Dr. Jack, and understood from him that he was willing to undertake the duties of a chief station if he were provided with funds necessary for obtaining assistance. He further testified his readiness, under any circumstances, to go on with the work of an *ordinary* station, by requesting me to procure certain instruments at the expense of the College.

I believe Dr. Jack to be a gentleman of considerable acquirements, and it will be a satisfaction to me to obtain his co-operation as the superintendent of a chief station; unless it be the opinion of the Department, that having two such stations in one Province when other Provinces as yet have but one, may cause dissatisfaction elsewhere.

I suggest, therefore, that the sum of $100 be placed at the disposal of Dr. Jack, to be expended in meteorological instruments and arrangements connected therewith, and that an allowance be made, at the rate of $400 per annum, to aid in the observations, such allowance not to commence till Oct. 1, 1871, since $300 only will remain available for this purpose after other claims have been met.

In making this recommendation, I consider that Dr. Jack, and all other persons receiving subsidies should understand that they are required to conform to the directions of the officer appointed to superintend the Central Office; and that one of the primary duties of a chief station is to record observations day and night, at intervals not greater than three hours.

With reference to your letter of 13th September, I see that Dr. Jack did not quite understand what I said about available funds.

The sum of $4,000, which was the only part of the $5,000, of whose distribution I had prepared an estimate, was all appropriated; but there remained $1,000, of which I understand $600 was to be employed at Ottawa, thus leaving $400, which might be used in the manner above suggested.

I have, &c.,
(Signed,) G. T. Kingston.

(No. 24.—Copy.)

Report to Council by Minister of Marine and Fisheries.

Ottawa, 28th April, 1871.

The undersigned has the honor to submit to Council, Professor Kingston's report in reference to the proposed expenditure for meteorological and climatological purposes. He also begs to state to Council, that he has carefully considered the scheme of expenditure proposed by Professor Kingston, and generally approves of the same. He therefore recommends that he be authorized to make such arrangements to carry out the intentions of Parliament in connection with this branch of the Public Service, and that the expenditure of the appropriation of $5,000, made for that purpose, be placed under the direction of the Department of Marine and Fisheries.

Respectfully submitted.

(Signed,) P. Mitchell,
Minister of Marine and Fisheries.

(No. 25.—Copy.)

Professor Kingston to the Signal Officer, Washington.

Magnetic Observatory,
Toronto, 6th June, 1871.

Sir,—I am authorized by the Honorable P. Mitchell, Minister of Marine and Fisheries of Canada, to open a communication with you relative to a systematic interchange, by telegraph, of meteorological information between Canada and Washington.

I will briefly state the nature of these operations which I propose, and after learning whether you favor the proposal, and can make arrangements for meeting the expenses of telegraph within the territory of the United States, I will be prepared with your concurrence to decide on the matters most suitable to be communicated, and on the most convenient mode of communicating them. I may also add that the practicability of carrying out any scheme, as regards this side of the lines, will depend upon our making satisfactory arrangements with the Telegraph Companies.

The limited area within which observations are carried on in Canada, places this country in a far less advantageous position than the United States, in collecting data for forecasts of weather. Preparations are in progress for improving this state of things, but it is my belief that for the present, at least, the arrangement most beneficial for both countries would be for us to give you present *facts*, and for you to give us opinions as to coming weather.

The order of the arrangement would be as follows :—

1. Each morning, about 9 a.m., I would send you a message, giving the meteorological conditions at 7 a.m., as observed at Halifax, St. John, N.B., Quebec, Montreal and Toronto.

2. You would then, as soon as practicable, send to me your opinion as to the most probable weather during the 24 hours, from (say) 6 p.m. of that day in various regions, including the Lakes and River St. Lawrence, the Gulf of St. Lawrence, and the coasts of New Brunswick and, Nova Scotia.

I understand that Dr. Smallwood, of Montreal, has opened some communication with you. I would not wish to disturb arrangements made by him, unless a single channel of intercourse between the two countries can be shewn (which I believe it can) to be more convenient and economical.

Waiting to learn your opinion on the subject of my letter,

I remain, &c.,

(Signed,) G. T. Kingston.

(No. 26.—Copy.)

THE SIGNAL OFFICER, WASHINGTON, TO PROFESSOR KINGSTON.

OFFICE OF CHIEF SIGNAL OFFICER,
WASHINGTON, U.S., June 9th, 1871.

SIR,—I am directed to acknowledge the receipt of your favor of the 6th inst., in reference to an exchange of weather reports, and to say in reply that such an exchange will be cheerfully made on the part of this office, provided your observations can be made synchronous with those made by our observers, and transmitted at hours and in a manner that will render them immediately available.

The telegraphic observations for this division are made three times daily, at 7.35 a.m., 4.35 p.m., and 11.35 p.m., Washington mean time, and reach the central office here, by a special arrangement of circuits, at 9 a.m., 6 p.m., and 1 a.m., respectively.

Reports from the points named by you would be valuable if their receipt at these hours could be relied upon, and without them the synopsis and probabilities could not be made sufficiently definite to be of much value to you. The synopsis leaves the office three times daily, at the hours of 10.30 a.m., 7.30 p.m., and 1.15 a.m., respectively.

I have the honor to enclose copies of our daily weather map, showing points from which reports are now received. It is proposed to extend the system as rapidly as men can be properly instructed and instruments secured. If the hours named meet your approval, any details necessary to perfect arrangements can be speedily made.

Very respectfully, &c.,

(Signed,) H. W. HOWGATE,
Acting Signal Officer's Assistant.

(No. 27.—Copy.)

PROFESSOR KINGSTON TO THE CHIEF SIGNAL OFFICER, WASHINGTON.

MAGNETIC OBSERVATORY,
TORONTO, 12th July, 1871.

SIR,—I have been apparently discourteous in not replying sooner to your letter of 9th June, but I will explain.

It is easy to see that unless the observations at distant points are synchronous, their value for purposes of prediction will be much impaired.

Now, for the ordinary objects of meteorological research, namely, those for which our larger stations are being now reorganized, it is *local* and not absolute time that must be kept, and it will be necessary either to take these three observations *in addition* to the others, or to establish special stations where the observations are made at *absolute* time only. I am inclined hereafter to follow the last named course, and hope in due time to select from among my correspondents a corps of about fifty observers, where observations may be made with special reference to this object.

In the meantime, however, as a temporary measure, it will be necessary to get our chief stations (of which Montreal will be considered as one) to take the additional observations required for this synchronous system. They must be *additional*, for it would not do to abolish the observations for which these stations are now in course of formation.

I am about to make a tour of inspection in Quebec, New Brunswick and Nova Scotia, and shall confer with the *chief* observers as to the manner in which these observations may be made compatible with the primary duties of their station. On my return, I will again write to you, and make arrangements for furnishing our Canadian contingent to your work.

Yours respectfully,
(Signed,) G. T. KINGSTON.

(Copy—No. 28.)

PROFESSOR KINGSTON TO SIGNAL OFFICER, WASHINGTON.

MAGNETIC OBSERVATORY,
TORONTO, 10th October, 1871.

SIR,—Referring to my letter of 6th June, 1871, in which I propose to exchange weather reports with Washington and sundry points in Canada; referring also to your reply of June 7th, and to my subsequent letter dated July 12th, in which I stated that I was about to make official visits to meteorological stations in the Lower Provinces, I have now to inform you that I have made arrangements with Mr. Allison, of Halifax, my chief meteorological agent in Nova Scotia, and with Mr. Murdoch, who occupies a similar position at St. John, New Brunswick, whereby these gentlemen will be ready to send to Washington the usual messages of twenty words in the morning and ten words in the afternoon (Washington time), but that for the present the night report cannot be sent from Halifax, on account of the early closing of the telegraph office.

From Toronto I will send the three messages. I have said we are *ready* to send the messages, but I must add that our actually sending them will depend on our making satisfactory arrangements to meet the cost of telegraphing, for which no provision has been made.

As the signal office has extensive dealings with the telegraph companies, it is probable that your negotiations would be more successful than mine to open communications with Halifax and St. John, and to enable Toronto to send through Buffalo on the same terms as Montreal now sends through Portland.

Connected with this matter, there are two points on which I shall feel thankful for information. Is the number of words in the message *returned* to a station from Washington (for each station included in the message) the same as the number of words sent *from* that station to Washington?

What is the relative cost of the message sent and the returned messages?

Supposing the financial question to be satisfactorily arranged, I will be thankful if return messages from a few selected points were sent to Toronto, St. John, New Brunswick and Halifax.

Our meteorological system in Canada is in its infancy, and as it depends chiefly on gratuitous labor, much time must elapse before many new observers can be brought to take part in a telegraphing service. There are, however, a few places in course of preparation, and if you think it worth while to suggest to me any points within the Dominion and the reach of the wires, from which daily intelligence would be specially desirable to make your system complete, I would make an effort to perfect the equipment of such stations as may be nearest to the points which you name, so that you as well as ourselves may have the benefit of them.

The following are some of the stations which within a year might be made available :—

Sydney, Cape Breton ; Father Point, Lower St. Lawrence ; Pictou, Nova Scotia ; Stayner, near Collingwood ; Yarmouth, Nova Scotia ; Pembroke, Upper Ottawa ; Cape Rosier, Gaspé.

As the care of this service in Canada has been entrusted to me by the Government, I shall be obliged (in the event of the proposed arrangements being carried out) if you will send to myself for circulation any statement or probabilites with which you are disposed to favor this country, in which case I would make a daily public acknowledgment of the authority from which the forecasts were derived.

May I request that you will kindly send to myself as well as to Mr. Allison, of Halifax, and Mr. Murdoch, of St. John, copies of the pamphlets of instructions and specimens of the forms and other documents relating to this service.

I am, &c.,

(Signed,) G. T. KINGSTON.

(No. 29.—Copy.)

MR. H. W. HOWGATE, OF THE OFFICE OF CHIEF SIGNAL OFFICER, WASHINGTON, TO PROFESSOR KINGSTON.

WASHINGTON, 16th Oct., 1871.

SIR,—I am directed to acknowledge the receipt of your favor of the 10th inst., and to say, in reply, that the Chief Signal Officer will be pleased to exchange reports with you, provided those made by your observers can be taken in the manner and at the times necessary to make them synchronous with our own observations.

I send by this mail a copy of the "Instructions to Observers," from which you will be able to gather the information you desire in reference to the kind of reports and the manner of sending them.

The arrangements made with the Western Union Telegraph Co. for the transmission of the reports, provides for the payment of two (2) cents per word for each circuit over which they pass, the circuits ranging in length from three hundred to twenty-seven hundred miles. This, of course, applies only to the Western Union and other lines doing business in the United States.

We pay the Montreal Company the same rate for the report from Montreal, which is kindly furnished by Dr. Smallwood. The number of words *returned* to a station varies with the estimated wants of the station. The stations along the sea and gulf coasts, for instance, receiving full reports from all other stations, while those remote from the coast receive a much smaller number. The returned reports are paid for at the same rate as those received.

The Chief Signal Officer has named the following places in Canada as desirable ones to receive regular reports from—Toronto and Kingston on Lake Ontario ; Ports Talbot and Dover on Lake Erie, and some point on Lake Huron as far north of Goderich as possible. Collingwood would be preferable to Goderich, but a station on the lake would be better than that.

The other points named by you will be interesting but not of special value to our service at present.

For reports from the stations named, the regular rate of two (2) cents per word for each report made in the established form, will be paid for on delivery at Buffalo or some other point to be selected in the United States.

Should you desire any reports in return they will be furnished by our Observer at Buffalo, free of expense—you paying for the transmission from that place.

Hoping to hear from you again upon this subject,

I remain,
Very respectfully,
Your obedient servant,
(Signed,) H. W. HOWGATE.
Assistant.

(No. 30.—Copy.)

PROF. KINGSTON TO MR. H. W. HOWGATE, OF THE OFFICE OF CHIEF SIGNAL OFFICER, WASHINGTON.

WASHINGTON, 23rd Oct., 1871.

SIR,—I have the honor to acknowledge your letter of Oct. 16, 1871, and to state in reply, that I will be ready to commence sending reports to Washington as soon as the necessary arrangements with the Montreal Company shall have been completed.

In the meantime, I desire explanations on the following passages in your letter :—"The other points mentioned by you would be interesting but not of special value to our "service at present." Am I to understand that this applies to Halifax and St. John, or do you desire reports from these stations? In the latter case do you propose to pay the cost of transmission to Washington?

With reference to places named in your letter as proposed reporting stations, would Port Stanley serve as well as Port Talbot, and would Simcoe, a town a few miles inland, serve as well as Port Dover.

As regards Lake Huron and Georgian Bay, the only place at present available is nine miles inland of Collingwood.

I am,
Respectfully yours,
(Signed,) G. T. KINGSTON.

(No. 31.—Copy.)

MR. H. W. HOWGATE, OF THE OFFICE OF THE CHIEF SIGNAL OFFICER, WASHINGTON, TO PROFESSOR KINGSTON.

WASHINGTON, 27th Oct., 1871.

DEAR SIR,—I am directed to acknowledge the receipt of your favor of the 23rd inst., and to say in reply that reports from Halifax and St. John are not considered essential at present, although they would be interesting. The limited appropriations at the disposal of this office compels it to select those points only which are of immediate use, and of these, besides Toronto and Kingston, are Port Dover (not Simcoe), Port Stanley, as you suggested instead of Port Talbot, and Collingwood. The place you refer to, nine miles from the latter town, would not meet the needs of the office.

The cost of transmitting these reports three times each day, when made in accordance with the forms furnished, and sent at the hours indicated by this office, will be paid by the Chief Signal Officer, provided it does not exceed two cents per word for each report.

I enclose a copy of the last annual report of the Chief Signal Officer, and invite your special attention to that part of it which refers to the working forms of circuits, and suggests that you adopt a similar method of circuiting the Canadian wires for the transmission of meteorological reports as a measure of economy. I also enclose a copy of the agreement made by this office with the Western Union Telegraph Company.

I should be pleased to hear from you again soon, and hope that you will be prepared to start the reports from some of the points named at once, in order to benefit as much as possible the shipping interests on the lakes, for which Canada ought to feel as much responsibility as the United States.

Very respectfully, &c.,
(Signed,) H. W. Howgate,
Lieut. and Brevet Capt. U. S. A.

(No. 32.—Copy.)

Prof. Kingston to Mr. H. W. Howgate, of the Office of the Chief Signal Officer, Washington.

Washington, 30th October, 1871.

Sir,—I beg to state that I am prepared to send to Washington weather telegrams in accordance with your programme on every day but Sunday. The Montreal Telegraph Company, *at present*, makes a difficult regarding the transmission of messages on Sunday, but I trust that a way will soon be found of removing that difficulty.

Will you be so good as to inform me by what distinguishing number Toronto will be known, and also on what day the Buffalo Observer will be prepared to repeat my messages.

With reference to a station on Lake Huron, or Georgian Bay, I have in view the establishing a station at Saugeen, at the mouth of the Saugeen River, but as no Observer has yet been found there, some time must elapse before the station can be organized. At Collingwood I could probably start observations by the end of the year; but at Stayner, a village some miles from Collingwood, on the Northern Railway, where I have a very good Observer, I could procure reports in two weeks from this.

If you will be so good as to let me know whether any one of these three places would suit your purpose, and also whether you would prefer Stayner *now*, or Saugeen four months hence. I will give my attention in the first instance to the place which you select.

I am, respectfully yours,
(Signed,) G. T. Kingston.

(No. 33.—Copy.)

The Signal Officer at Washington to Professor Kingston.

Office of the Chief Signal Officer,
Washington, U. S., Nov. 6th, 1871.

Sir,—I am directed to acknowledge the receipt of your favors of October 30th and 31st,* and to say, in reply, that the Chief Signal Officer would be pleased to have the Toronto reports commenced with the morning of November 12th. The observations to be made at 7.25 a.m., 4.25 p.m. and 11.25 p.m., and the reports to be telegraphed to Buffalo at 7.50 a.m., 4.50 p.m. and 11.50 p.m., Toronto mean time.

Instructions have been issued to the Observer at Buffalo to receive these reports, and to forward in return such as you may select from our list,—these latter to be paid for by you.

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* The letter from Toronto, dated October 31st, and here referred to, was merely an acknowledgment of books presented to the Observatory at Toronto by the Signal Office at Washington.
G. T. Kingston.

Reports from Saugeen are preferred to those from Collingwood, if they can be had in time to guard against the spring storms on the lakes.

Very respectfully, &c.,
(Signed,) H. W. HOWGATE,
Assistant, &c.

(No. 34.—Copy.)

PROFESSOR KINGSTON TO THE SIGNAL OFFICER AT WASHINGTON.

MAGNETIC OBSERVATORY,
TORONTO, Nov. 8th, 1871.

SIR,—In reply to yours of Nov. 6th, in which you express the desire of the Chief Signal Officer, that Toronto should commence on Nov. 12th, I regret to state that in consequence of the refusal of the Montreal Company's officer here to keep the telegraph office open on Sunday, I shall not be able to commence till the morning of Nov. 13th.

With respect to receiving your reports in return, I shall be compelled for a few days to forego that advantage; indeed I shall prefer to wait till I can send the reports from at least one more station in Canada, which I hope to do in about fourteen days hence.

I am, &c.,
(Signed,) G. T. KINGSTON.

(No. 35.—Copy.)

THE SIGNAL OFFICER AT WASHINGTON TO PROFESSOR KINGSTON.

OFFICE OF THE CHIEF SIGNAL OFFICER,
WASHINGTON, U. S., Nov. 27th, 1871.

SIR,—The reports from Toronto are so important in reference to the commercial interests upon Lake Ontario, that it is very essential there should be no interruption of these on Sundays as at present, and I write by direction of the Chief Signal Officer, to ask if you cannot arrange with the telegraph company to have its office kept open on Sundays during the hours for the transmission of these reports.

Perhaps if the importance of the work were clearly pointed out to the gentlemen controlling the line to Buffalo, they would not choose to decline your request.

Reports from Quebec are desired as soon as three reports per day can be assured, and I should feel greatly obliged if you will keep me informed, from time to time at your convenience, of the progress making in arrangements for this work, and for the station on Lake Huron.

Very respectfully, &c.,
(Signed,) H. W. HOWGATE,
Assistant, &c.

(No. 36.—Copy.)

PROFESSOR KINGSTON TO THE SIGNAL OFFICER AT WASHINGTON.

MAGNETIC OBSERVATORY,
TORONTO, Dec. 12th, 1871.

DEAR SIR,—I hoped to have sent reports to-morrow from Kingston and Stanley; but all things considered, I have thought it wiser to postpone this till the new cypher comes into use. On the morning of January 2nd, therefore, you may expect the messages from Kingston, Dover, and Stanley; and, unless some untoward event occurs, from Saugeen

also. Speedy action is sadly checked at this season by the difficulties of travelling; in fact, the establishment of these stations will have involved journeys by stage to the amount of 370 miles. On January 2nd I shall be thankful to receive all or nearly all the reports which at present are received at Buffalo, and as a preparatory step, I propose, on the morning of Dec. 26th, to receive reports from a few stations to be presently named, and will feel obliged if you will instruct your Buffalo Observer accordingly, and also that the reports be sent as one message.

I remain,
Yours respectfully,
(Signed,) G. T. KINGSTON.

The following are the stations from which weather reports are desired at Toronto on the morning of January 2nd, 1872 :—

St. Francisco, Milwaukie, Portland, Counne, Chicago, Boston, Omaha, Detroit, Philadelphia, St Louis, Buffalo, New York.

(No. 37.—Copy.)

MR. H. W. HOWGATE, OF THE OFFICE OF THE CHIEF SIGNAL OFFICER, WASHINGTON, TO PROFESSOR KINGSTON.

WASHINGTON, U. S., December 16th, 1871.

DEAR SIR,—In accordance with your request of the 12th instant, I have directed the Observer at Buffalo to send the reports designated by you on the 26th instant. I have also mailed to your address two copies of each edition of the cipher.

Arrangements will be made to receive the reports from Kingston, Port Stanley, Port Dover and Saugeen, on the morning of January 2nd, as suggested by you, and our own reports will be sent you at Toronto, in full or in part as you may wish.

Very respectfully, etc.,
(Signed,) H. W. HOWGATE,
Assistant, etc.

(No. 38—Copy.)

PROFESSOR KINGSTON TO MR. H. W. HOWGATE, OF THE OFFICE OF THE CHIEF SIGNAL OFFICER, WASHINGTON.

TORONTO, February 14th, 1871.

SIR,—I regret to state that I am compelled to suspend the weather telegrams from the four out stations in Canada till Parliament has voted the necessary supplies, or until I can make some other arrangement for meeting the cost. I shall continue to send the Toronto telegram as usual on the week-days, and, if possible, on Sunday also; but it is not unlikely that the Company may again refuse to forward them on that day.

I am getting Quebec into working order, and shall have it ready before the time that our operations begin again.

I am, &c.,
(Signed,) G. T. KINGSTON.

(No. 39—Copy.)

H. W. HOWGATE TO DR. C. SMALLWOOD.

WAR DEPARTMENT,
OFFICE OF THE CHIEF SIGNAL OFFICER,
WASHINGTON, D. C., April 2nd, 1871.

SIR,—Prof. Henry, of the Smithsonian Institution, and Commodore Sands, of the Naval Observatory, have referred to this office communications from you in reference to

the interchange of meteorological observations, and, in reply, I am directed by the chief signal officer to say, that he will be pleased to correspond with you upon the subject, with the view of making arrangements that will prove mutually satisfactory and useful. He is desirous of getting reports from various points in the Dominion, ranging from Georgian Bay in the west, to Quebec in the east, for the purpose of protecting, in an effectual manner, the interests of commerce upon the lakes and seaboard, from the influence of storms approaching from the northward.

In this connection I am directed to request suggestions from you as to the best means of accomplishing this object, stating for your information that the observers at our present stations are non-commissioned officers of the United States' army, specially instructed in the use of iustruments, and manner of making accurate observations with them. It is possible that permission can be obtained from the Colonial Government to send our own observers to such stations as may be desired, but if not, information as to the cost of civilian observers will be valuable.

Very respectfully, &c.,
(Signed,) H. W. HOWGATE,
Acting Signal Officer & Assistant.

(No. 40—Copy.)

H. W. HOWGATE TO DR. C. SMALLWOOD.

WAR DEPARTMENT,
OFFICE OF THE CHIEF SIGNAL OFFICER,
WASHINGTON, D. C., April 14th, 1871.

DEAR SIR,—I have the honor to acknowledge the receipt of your favor of the 6th instant, and in reply, I am directed by the Chief Signal Officer to say, that he is now negotiating for the telegraphic service necessary for the ensuing year, and that in view of your generous offer he will include the Montreal reports in any arrangement that may be made, and it will afford him pleasure to exchange observations with so distinguished a meteorologist as yourself, in such manner as may be found practicable.

Very respectfully, &c.,
(Signed,) H. W. HOWGATE,
2nd Lieutenant and Brevet Captain, U. S. A.,
Acting Signal Officer & Assistant.

(No. 41.—Copy.)

H. W. HOWGATE TO DR. C. SMALLWOOD.

WAR DEPARTMENT,
OFFICE OF THE CHIEF SIGNAL OFFICER,
WASHINGTON, D. C., May 23rd, 1871.

DEAR SIR,—I am directed to inform you, that after the 24th inst., reports from forty-eight stations will be received by our Observer at Portland, Me., three times a day, and that instructions will be given him to furnish you with as many of them as you desire, provided they be taken without additional expense to this Department. These reports will be taken at 7·35 a.m., 4·35 p.m., and 11·35 p.m., Washington mean time. We should be pleased to receive, at Portland, in exchange, such reports as it may be in your power to give from points north of the great lakes.

Very respectfully, &c.,
(Signed,) H. W. HOWGATE,
2nd Lieutenant and Brevet Captain, U. S. A.,
Acting Signal Officer & Assistant.

(No. 42.—Copy.)

H. W. HOWGATE TO DR. C. SMALLWOOD.

WAR DEPARTMENT,
OFFICE OF THE CHIEF SIGNAL OFFICER,
WASHINGTON, D. C., June 6th, 1871.

DEAR SIR,—Fearing that a previous letter of mine has failed to reach you, I repeat the substance of its contents by direction of the Chief Signal Officer.

In accordance with your request, it is proposed to furnish you at Portland, Me., with such of the signal service weather reports as you may select from the enclosed list, which comprises all the stations now occupied. Reports from various points of the Dominion would be of great value to this office, and an exchange is solicited, this office paying for transmission from Montreal to Portland the same rate that is paid for like service in the United States, which is two cents per word, provided of course the work cannot be done for less.

It is desirable that the reports be synchronous with our own, the observations for which are taken daily at 7.35 a.m., 4.35 p.m. and 11.35, Washington mean time. Should you decide to make such in exchange, the necessary blanks, &c., for making out the reports and recording the observations will be furnished by this office on application. The details of time, of transmission, &c., can be arranged by correspondence. I have the honor to enclose herewith, a copy of to-day's issue of the weather map, distributed by this office, together with a copy of daily bulletin.

Very respectfully, &c.,
(Signed,) H. W. HOWGATE,
Acting Signal Officer & Assistant.

(No. 43.—Copy.)

H. W. HOWGATE TO DR. C. SMALLWOOD.

WAR DEPARTMENT, OFFICE OF CHIEF SIGNAL OFFICER,
WASHINGTON, D. C. June 21st, 1871.

DEAR SIR,—Your favor of the 12th inst., has remained unanswered for several days, on account of the absence of the Chief Signal Officer from the city. He has now returned, and directs me to say in reply, that before concluding arrangements with you, it would be necessary to get information on the following points :—

1st. What kind of instruments will your observers use?

2nd. Can these observers be relied on to make the three daily observations without fail?

3rd. What authority do you exercise over these observers?

4th. Can you make any arrangement with the Director of the Magnetic Observatory in Toronto by which the receipt of these reports can be ensured?

This information is necessary for the Chief Signal Officer before he can authorize expenditure of any public money. He directs me to state that it will give him great pleasure to co-operate with you in the matter as soon as these points are settled.

Very respectfully, &c.,
(Signed,) H. W. HOWGAT,
Acting Signal Officer & Assistant.

(No. 44.—Copy.)

H. W. Howgate to Dr. C. Smallwood.

War Department, Office of the Signal Officer,
Washington, D. C., July 1st, 1871.

Dear Sir,—I have to acknowledge receipt of your favors of the 23rd and 27th ultimo, with telegram of the latter date, and am instructed to reply, that the reports from Toronto, Quebec and Montreal, will be accepted with the understanding that the observations shall be synchronous with our own, and shall eventually be made with instruments furnished by this office. Until these instruments are furnished, the observations will of course be made with those now in use.

It is especially desirable that the reports should be made regularly and promptly, in order that they may be of value.

Additions can be made from time to time to the list of stations, whenever assurance can be given that the reports will be made regularly.

I forward by this mail three copies of "Instructions to Observer Sergeants" of the Signal Service, U. S. A., one for each of the three stations named, giving the time of observation and report at each, and in detail, the manner of making, correcting and recording observations.

Instructions have been issued to the Observer at Portland to furnish you regularly, on application, such reports from our stations as you may select.

A sufficient quantity of the necessary forms for recording observations is forwarded to your address, with the request that they may be used habitually, and that the weekly reports on Form 4, be made out and sent to this office regularly at the end of each week.

Very respectfully, &c.,
(Signed,) H. W. Howgate,
Acting Signal Officer & Assistant.

P.S.—Should this arrangement prove satisfactcry, I take the liberty of naming July 15th, as the day on which the reports commence. Please inform me if this is satisfactory.
H. W. H.

(No. 45.—Copy.)

H. W. Howgate to Dr. C. Smallwood.

Washington, 9th July, 1871.

Dear Sir,—I have forwarded you, by this day's mail, 200 copies of Form 5, for afternoon and night reports; 100 copies Form 1, for morning reports; 50 Forms 4 weekly reports, and 300 Forms 2, receiving sheets, and shall esteem it a favor if you wil distribute them equally to the three stations. Will send a fresh supply, if necessary before these are gone. Have instructed the Portland Observer to furnish you all reports called for. His address is:—"Sergt. R. E. McGrudy, Observer, Signal Service, U.S.A., Portland, Maine." Trusting that the exchange of reports will prove mutually satisfactory,

I remain, &c.,
(Signed,) H. W. Howgate,
Acting Signal Officer & Assistant.

(No. 46.—Copy.)

H. W. Howgate to Dr. C. Smallwood.

Washington, 22nd July, 1871.

Dear Sir,—Your favor of the 19th instant received, and in reply I am directed say, that arrangements have been made with the Western Union Telegraph Co. by whicl that Company settle with the Montreal Co. as suggested.

Cannot the morning and afternoon reports from Quebec and Toronto be sent until arrangements are made for the midnight observations ?

Very respectfnlly, &c.,
(Signed,) H. W. HOWGATE,
Acting Signal Officer & Assistant.

(No. 47.—Copy.)

H. W. HOWGATE TO DR. C. SMALLWOOD.

WAR DEPARTMENT, OFFICE OF THE CHIEF SIGNAL OFFICER,
WASHINGTON, D.C., August 24th, 1871.

DEAR SIR,—In reply to your favor of the 14th instant, I am directed to say, that your request to be supplied with the synopsis and probabilities will be brought before the Secretary of War, and it is believed his decision will be favorable. The Chief Signal Officer also directs me to thank you, in his name, for the energy with which you have co-operated with this office, and for your efforts to extend the service throughout the Dominion, but he is so deeply impressed with the necessity of having the reports from the points named by you, similar in substance and in form to those made by the regular observers, that he desires to know whether *all* or any of them cannot be had in full, and in the same cipher as those of United States. The names of such as can make full and regular reports are desired, as also information as to what action is necessary to ensure such reports from all desired points. The Chief Signal Officer is unwilling, except in a case of the greatest necessity, to complicate the formal reports of the office with those made casually and irregularly. Very little additional labor would be required to fill up the forms in proper shape after making the observation referred to in your letter. Please give me the location of **Cape Rosier* and of *Sackville, as neither of them are on our office maps.

Hoping to receive a speedy reply,

I remain, &c.,
(Signed,) H. W. HOWGATE,
2nd Lieutenant & Brevt. Captain, U.S.A.
Acting Signal Officer & Assistant.

(No. 48.—Copy.)

DR. C. SMALLWOOD TO HON. P. MITCHELL.

MONTREAL OBSERVATORY, June 12th, 1871.

HONORABLE AND DEAR SIR,—I have only this day concluded arrangements with the Montreal Telegraph Company, in connection with the Signal Office of the War Department of the U. S., for the transmission and reception of their reports.

I have submitted to the Montreal Telegraph Company the request of your's of the 30th May last, and they will send on reports to Ottawa at two cents per word.

As to the hours of transmission, I cannot yet positively state the hour, until final arrangements are made with the Signal Office at Washington. The whole of the observations received and transmitted will be in Washington mean time, which of course I must correct for your local time at Ottawa.

Immediately upon the receipt of final instructions from Washington, I shall lose no time in advising yon of the arrangements.

Would you kindly state if the services as above would be satisfactory to you.

Believe me, &c.,
(Signed,) C. SMALLWOOD

---

* Have found them both since the above was written.
H. W. H.

(No. 49.—Copy.)

THE DEPARTMENT OF MARINE AND FISHERIES TO C. SMALLWOOD, M. D.

OTTAWA, 20th June, 1871.

SIR,—I have to acknowledge receipt of your letter of the 12th inst., addressed to the Minister of Marine and Fisheries, in reference to the transmission of the weather reports from Washington. With reference to the rate charged by the Montreal Telegraph Company, I beg to inform you that the Department has no funds at its disposal at present, with which to defray the expense of telegraphing at the rate referred to.

I have to request that you will be good enough to inform me how many words would probably be required to be sent to make a report intelligible.

The Department does not consider it advisable that any messages should be sent in the meantime until further information is obtained. Enquiries are now being made as to whether the Telegraph Company would, in the interests of science and the public welfare, transmit messages either free or at nominal rates, and when this has been ascertained I will again communicate with you.

I am, &c.,

(Signed,) WM. SMITH,
Deputy of Minister of Marine, &c.

(No. 54.)

RETURN

To an ADDRESS of the SENATE, dated 23rd April, 1872; For Copies of all Correspondence with the Imperial Government, or with any person or persons since the 28th February, 1871, in relation to the question of "Copyright," as well as to that of "Reprinting British Copyright Works in Canada." Also a Return shewing the amount of duty collected upon copies of British Copyright Works imported into the Dominion from the United States, during the fiscal year 1870-71, and shewing further, the amount of such duties as have been paid to the Author or Authors of such Works; and further, a Return stating at what dates and periods, with reference to the dates of publications, lists of works which are copyright, are transmitted from the proper Department in London for the guidance of the proper Department for collecting the duty on copies of such copyright works in this Country.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 7th May, 1872.

(No. 55.)

RETURN

To an ADDRESS of the SENATE, dated 10th April, 1871; For a Return of all the cases in the Dominion of Canada, in which sentences of corporal punishment have been carried into effect, with a statement of the ages of the criminals, the nature of the offences committed, the names of the Judges, Magistrates or Justices who passed the sentences, the number of the lashes ordered to be administered in each case, the instrument with which they have been inflicted, and of the time which elapsed between the infliction of the punishment and the discharge of the prisoner.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 16th April, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing the above Returns are not printed.*]

(No. 56.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 20th May, 1872; For copies of Tenders for the supply of Coal Oil for Lighthouse purposes for the years 1870, 1871 and 1872, with the reports of the Inspectors on Samples.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 27th May, 1872.

(No. 57.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 23rd May, 1872; For all correspondence between the Government and the Lieut.-Governor of Manitoba, and the North West Territories, and generally all reports and representations made to the Government, having reference to the introduction into the North West Territory, by persons not being British subjects, of intoxicating drinks, arms, ammunition and other supplies, for sale or disposal to natives of the said Territory and others residing therein.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 29th May, 1872.

(No. 58.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated the 20th May, 1872; For a copy of the Laws of Manitoba, enacted during the last Session of the Local Legislature, relating to the registration and qualifications of Electors, and the constitution of a Supreme Court.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 29th May, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing, the above Returns are not Printed.*]

RETURN

ON THE ELECTIONS OF THE PROVINCES

OF

MANITOBA AND BRITISH COLUMBIA.

RAPPORT

SUR LES ELECTIONS DES PROVINCES

DE

MANITOBA ET DE LA COLOMBIE ANGLAISE.

BY—PAR

EDOUARD J. LANGEVIN, { ESQUIRE, / ECUYER,

Clerk of the Crown in Chancery for Canada.

Greffier de la Couronne en Chancellerie pour le Canada

PRINTED BY ORDER OF PARLIAMENT.

OTTAWA:
PRINTED BY I. B. TAYLOR, 29, 31 & 33 RIDEAU STREET.

1872.

RETURN

Prepared from the records of the Elections, to the present House of Commons, in British Columbia and Manitoba, showing the aggregate number of Votes polled in each Electoral Division in which there has been a contest, with the total number polled in each such Division, and the number of Votes on the Voters' Lists of the same respectively, and the Population in each Constituency as shown by the last Census.

RAPPORT

Fait d'après les Archives des Elections des Membres de la présente Chambre des Communes pour la Colombie Anglaise et Manitoba, indiquant le nombre total de votes enregistrés dans chaque division électorale (où il y a eu contestation) avec le nombre total de votes enregistrés dans chaque telle division, le nombres de votes inscrits sur les listes électorales de ces divisions, respectivement, et la population de chaque collége électoral, telle qu'indiquée par le dernier recensement.

Electoral Districts. / Districts Électoraux.	Sub-Divisions.	Names of Candidates, and Number of Votes polled for each of them in each sub-division. / Noms des Candidats et le nombre de votes donnés pour chacun d'eux dans chaque subdivision.		Total Number of Votes polled in each Division. / Nombre total des votes donnés dans chaque division.	Number of Voters on the Voters' List in each Division. / Nombre d'électeurs inscrits sur la liste des électeurs dans chaque division	Population in each Constituency as shewn by the last Census. / Population de chaque Collége Electoral d'après le dernier recensement.	Remarks. / Observations.
PROVINCE OF MANITOBA. / PROVINCE DE MANITOBA.		Smith.	Taylor.				
Selkirk	Headingly and St. Charles.....	68	38	106	.....	667	
	St. Boniface { East and West / Est and Ouest }	94	1	95	.....	821	and Fort.
	St. James, Winnipeg..... / St. John and Kildonan	77	64	141	.....	1,332	
	Totals ..... / Totaux	239	103	342	.....	2,820	
	Majority for Donald A. Smith, Esquire, / Majorité pour ,, ,, Ecuier,	136.					
		Delorme.	Dease.				
Provencher	St. Norbert.....	157	26	183	.....	1,098	and St. Norbert { South. / Sud.
	Ste. Anne	15	3	18	.....	323	
						356	Ste. Agathe.
						366	St. Vital.
	Totals ..... / Totaux	172	29	201	.....	2,143	
	Majority for Pierre Delorme, Esquire / Majorité pour ,, ,, Ecuier,	143.					

Electoral Districts. — Districts Électoraux.	Sub-Divisions.	Names of Candidates and Number of Votes polled for each of them in each sub-division. — Noms des Candidats et le nombre de votes donnés pour chacun d'eux dans chaque subdivision.		Total Number of Votes polled in each Division. — Nombre total des votes donnés dans chaque division.	Number of Voters on the Voters' List in each Division. — Nombre d'électeurs inscrits sur la liste des électeurs dans chaque division	Population in each Constituency as shewn by the last Census. — Population de chaque Collége Electoral d'après le dernier recensement.	Remarks. — Observations.
Province of Manitoba. — Province de Manitoba.		Schultz.	Inkster.				
Lisgar	St. Andrew's {North / Nord}	78	4	82	.....	1,484	
	St. Andrew's {South / Sud}	61	13	74	.....		
	St. Paul	32	11	43	.....	260	
	St. Clement	60	9	69	.....	447	
	St. Peter's	84	28	112	.....	918	
						17	Scanterbury.
	Totals / Totaux	315	65	380	.....	3,126	
	Majority for John Schultz, Esquire, / Majorité pour ,, ,, Ecuier,	250.					

		Angus McKay.	James S. Lynch.				
Marquette.....	High Bluff.....	1	281	282	.....	275	
	Lake Manitoba.....	46	.....	46	.....	145	
	White Horse Plains.....	235	1	236	.....	.....	
						544	Portage la Prairie (White Mud Portage West Home Mission.)
						142	Oak Point.
						512	Poplar Point.
						316	Baie de St. Paul.
						1,837	St. FrançoisXavier, West—Ouest. / St. François Xavier, East—Est.
						93	Long Lake.
	Totals..... / Totaux.....	282	282	564	.....	3,864	

Electoral Districts. / Districts Électoraux.	Sub-Divisions.	Names of Candidates and Number of Votes polled for each of them in each sub-division. / Noms des Candidats et le nombre de votes donnés pour chacun d'eux dans chaque subdivision.		Total Number of Votes polled in each Division. / Nombre total des votes donnés dans chaque division.	Number of Voters on the Voters' List in each Division. / Nombre d'électeurs inscrits sur la liste des électeurs dans chaque division	Population in each Constituency as shewn by the last Census. / Population de chaque Collége Electoral d'après le dernier recensement.	Remarks. / Observations.
PROVINCE OF BRITISH COLUMBIA. / PROVINCE DE LA COLOMBIE BRITANNIQUE.		Nelson.	Scott.				
New Westminster	New Westminster City and District ... / Cité et District	41	8	49	119	1,356	
	Burrard Inlet	49	5	54	113		
	Chilliwhack	24	1	25	49		
	Langley	11	10	21	51		
	Totals ..... / Totaux	125	24	149	332	1,356	
	Majority for Hugh Nelson, Esquire, / Majorité pour ,, ,, Ecuier, 101.						
Cariboo	J. Spencer Thompson, Esquire, / Ecuier, Acclamation					1,955	
Yale	Charles Frederick Houghton, Esquire, / Ecuier, Acclamation					1,316	
Victoria	Henry Nathan, jun., Esquire, / Ecuier, and Amor De Cosmos, Esquire, / Ecuier, Acclamation					4,540	

		Wallace.	Jessop.			
Vancouver Island .. } Ile de Vancouver .. }	Nanaimo	56	21	77	.....	729
	Cowichan	36	22	58	.....	221
	North Saanich } Saanich Nord }	11	11	22	..... }	213
	South Saanich } Saanich Sud }	4	16	20	..... }	
	Lake and Highland	7	16	23	.....	115
	Salt Spring Island	5	11	16	.....	.....
	Sooke	6	1	7	.....	39
	Comax	12	4	16	.....	102
	Totals } Totaux }	137	102	239	.....	1,419
	Majority for Robert Wallace, Esquire, } Majorité pour ,, ,, Ecuier, } 35.					

OFFICE OF THE CLERK OF THE CROWN IN CHANCERY FOR CANADA,
OTTAWA, 31st May, 1872.

BUREAU DU GREFFIER DE LA COURONNE EN CHANCELLERIE POUR LE CANADA,
OTTAWA, 31 Mai 1872.

EDOUARD J. LANGEVIN,
Clerk of the Crown in Chancery, Canada.

Greffier de la Couronne en Chancellerie, Canada.

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 20th May 1872; For Copies of all Correspondence between the Secretary of State for the Provinces, and any party or parties, including Officers of the Department, respecting Lot 51, Front of the Indian Reserve at Sarnia, and all valuations of said Lot or other documents relating thereto.

By Command.

J. C. AIKINS,

Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,

OTTAWA, 31st May, 1872.

[In accordance with the recommendation of the Joint Committee on Printing, the above Return is not printed.]

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 22nd May, 1872; For Copies of all Correspondence, Memorials, Reports and Orders in Council, since the 1st of July, 1867, relating to *trade relations between Canada and the West Indies.*

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 31st May, 1872.

Copy of a Report of a Committee of the Honorable the Privy Council, approved by His Excellency the Governor General in Council on the 21st May, 1872.

The Committee of Council have had under consideration the annexed memorandum, dated 30th April, 1872, from the Honorable the Minister of Public Works, having reference to the expediency of subsidizing a line of steamers between Canada and the Spanish West Indies, and recommending that Parliament be asked to place at the disposal of the Government the sum of $60,000, to enable it to subsidize, during 1872-73, one or more such lines of steamers to ply between the British and Spanish West India Islands, or one or the other of them, and the Dominion of Canada; such steamers to call at Halifax, N.S., on each voyage to and from Quebec, except during the winter months, when they will ply between the West Indies and Halifax, N.S., or St. John, N.B., as may be arranged with the owners of the steamers, and that any contracts made with such steamship lines shall be for a term of three or five years, as may be deemed most expedient.

The said memorandum and the documents thereto annexed having been referred for the report of the Honorable the Postmaster General, and the Honorable the Minister of Public Works,—the Postmaster General submits a report, dated 17th May, 1872, concurred in by the Minister of Public Works, stating that the establishment of direct mail communication by steamers between Canada and the British West Indies would tend beyond doubt to augment trade intercourse between the two countries, and that he concurs with Mr. Langevin in thinking that a line of steamers, under the Spanish flag, to Cuba, would also be a very valuable adjunct to the commercial facilities of the Dominion.

That no practical proposition to establish such a line has been submitted to the Government, however, and he thinks that that should be the first step in the matter.

That, with a company of sufficient resources to construct and run suitable steamers for such a line, the Government would have no difficulty in negotiating at any time should they be so disposed, without having any actual money voted by Parliament in advance.

That, acting upon the suggestions of the West Indies Commissioners, Mr. Barr, Member of the Court of Policy of Demerara, made, in 1869, on behalf of the Government of that Colony, a proposal to him, the Postmaster General, which was in substance,—that if Canada would establish a monthly line of steamers from Halifax to Demerara, touching at Barbadoes each way, they would contribute one-half the necessary subsidy. That Barbadoes, Mr. Barr thought, would also contribute, though this was, of course, mere matter of opinion. That he had repeated interviews with Mr. Barr, and also separately or with him saw Mr. (now Sir Hugh) Allan, as to the cost of such a line to the Governments concerned.

That the recommendation of the West Indies Commissioners on the subject was "to establish promptly a line of steamers, suitable for the carriage of mails, passengers, and freight, between Halifax, N.S., and St. Thomas in the West Indies, touching (until the completion of the Intercolonial Railway) at Portland, in the United States, so as to ensure regular semi-monthly communication between the ports mentioned," and that he, the Post Master General, was exceedingly anxious to forward the matter. That there were, however, considerations connected with the then expected union of Newfoundland with the Dominion, which rendered a postponement expedient.

That that colony desired as part of the terms of union—should one be made—that a monthly line from St. John to England, and a fortnightly one to Halifax and Quebec, should be established, and they also desired to be put in communication with the West Indies. That these necessities he found could have been conveniently worked in with the original proposition of a line from Halifax to Demerara, and in the hope of their making a union more advantageous, he postponed for the time—after submitting the matter to the Premier of the Government—making any recommendation on the subject.

That the simple monthly service from Halifax to Demerara would at the time have been undertaken by Mr. Allan for £1,000 a voyage.

That he is of opinion that communication should be had with the Governments of Demerara and Barbadoes, and that if they are willing to contribute towards the necessary subsidy he should be authorized to negotiate with the owners of lines of steamers on the Atlantic for a monthly line from Halifax to Demerara.

That the line under a Spanish flag to Cuba would necessarily have to be a separate one, and he thinks it might be intimated that the Government were willing to consider propositions for the establishment of such a line.

The Committee concurs in the foregoing report, and submit the same for Your Excellency's approval.

Certified.

WM. H. LEE,
Clerk, Privy Council.

(Copy.)

DEPARTMENT OF PUBLIC WORKS,
OTTAWA, April 30th, 1872.

Memorandum.

The undersigned has the honor to report :—

That at a recent interview had with a deputation from the Quebec Board of Trade and Manufactures, it was represented to him that the Government of Canada would facilitate and increase the trade relations between Canada and the West Indies by according a bonus or subsidy to one or more steamship lines, to ply between the Dominion and the British and Spanish Antilles.

That since the said interview, the undersigned has somewhat examined the question of permanent trade between Canada and the West India Islands, and has gathered the following facts :—

The Yearly Imports of the British West India Islands, from 1862 to 1869, inclusive, were as follows :—

—	1862. £ Sterling.	1863. £ Sterling.	1864. £ Sterling.	1865. £ Sterling.	1866. £ Sterling.	1867. £ Sterling.	1868. £ Sterling.	1869. £ Sterling.
Bahamas	1,250,322	4,295,316	5,346,112	1,470,467	328,622	365,316	231,526	240,584
Turk's Island...	35,956	45,183	70,199	80,549	56,091	52,121	40,778	34,873
Jamaica	1,141,983	1,087,529	1,142,919	1,050,984	1,030,796	859,186	1,024,566	1,224,414
Virgin Islands..	7,722	8,876	8,148	8,638	10,209	11,329	14,691	6,120
St. Christopher.	166,872	151,885	128,561	151,394	175,917	173,486	198,712	183,076
Nevis	31,125	36,022	28,227	37,176	34,936	40,657	54,801	61,013
Antigua.....	186,353	173,912	178,789	160,571	203,257	190,342	169,901	174,357
Montserrat	22,387	20,090	17,612	15,795	18,685	17,788	20,100	25,254
Dominica	60,592	47,755	43,558	52,374	62,188	51,047	51,181	64,765
St. Lucia.....	93,607	69,584	90,364	70,758	91,504	71,138	97,845	90,954
St. Vincent....	140,289	108,489	136,148	121,145	158,158	126,412	130,376	145,456
Barbadoes.....	913,141	878,209	910,080	953,335	988,082	989,503	1,134,251	1,026,221
Grenada.....	112,518	70,073	121,314	114,111	122,255	111,918	108,767	176,477
Tobago.....	55,875	46,869	49,782	47,487	57,645	54,826	48,895	52,168
Trinidad.....	733,598	710,972	883,940	810,347	930,329	858,847	927,796	1,027,230
£	4,951,842	7,770,764	9,155,753	5,145,131	4,268,674	3,973,916	4,260,189	4,532,962

The Yearly Imports of the British West India Islands, from Great Britain alone, were as follows :—

—	1862. £ Sterling.	1863. £ Sterling.	1864. £ Sterling.	1865. £ Sterling.	1866. £ Sterling.	1867. £ Sterling.	1868. £ Sterling.	1869. £ Sterling.
Bahamas	762,627	1,054,775	1,218,914	417,326	52,124	55,818	53,719	40,512
Turk's Island ..	5,660	1,868	13,417	12,961	9,535	14,302	1,258	1,297
Jamaica	603,081	581,227	627,888	642,785	684,448	534,097	623,663	775,088
Virgin Islands..	.....	.....	.....	.....	.....	35	.....	.....
St. Christopher.	72,768	59,779	60,108	77,890	94,902	89,855	100,232	80,693
Nevis	7,639	8,429	6,412	11,714	8,579	16,621	22,819	24,196
Antigua.....	73,891	69,946	70,063	64,999	72,815	79,695	63,089	64,253
Montserrat	1,037	1,138	5	834	1,032	1,300	2,254	2,510
Dominica	25,768	15,771	14,898	21,107	25,941	16,701	23,821	27,777
St. Lucia.....	32,089	17,663	31,238	26,623	31,715	23,823	42,631	35,434
St. Vincent....	49,978	41,777	53,690	35,817	61,500	46,889	53,882	62,662
Barbadoes.....	343,845	304,175	363,109	366,053	379,725	389,543	396,298	344,875
Grenada.....	47,749	36,944	65,832	56,920	52,115	51,657	49,804	98,332
Tobago.....	18,824	11,816	17,401	17,990	23,481	22,458	21,324	24,070
Trinidad.....	287,169	294,754	426,325	430,815	500,666	403,018	422,969	368,736
£	2,334,105	2,500,062	2,969,300	2,183,834	1,998,578	1,745,812	1,877,763	1,950,435

In 1869, the Imports of the three leading British West India Islands consisted, among others, of the following articles :—

——	Jamaica.	Barbadoes.	Trinidad.
Meat, salted or pickled	.....	2,190,903 lbs., £36,515	1,019,271 lbs., £31,970
Ale and Beer	214,835 gallons, £28,020	.....	.....
Bread	4,838 cwts., £8,263	.....	.....
Butter	3,539 ,, £16,748	639,477 lbs., £31,974	.....
Coals	41,627½ tons, £30,129	.....	.....
Indian Corn, Meal, Grain	11,515 barrels, £10,115	332,146 bush., 72,190 brls £107,574	.....
Cotton manufactures	£217,677	Cottons and Linens, £110,943	£138,447
Staves	.....	2,913,150 M. £29,132	.....
Fish (dried)	73,175 cwts., £62,918	87,673 quintals, £52,604	4,664,693 lbs., £36,326
Fish (wet)	51,261 barrels, £53,597	.....	.....
Flour, wheat	78,083 barrels, £146,876	104,950 brls., £131,188	47,861 brls., £60,357
Haberdashery	£116,194	.....	.....
Hardware and Machinery	£54,557	£27,098	£81,065
Linen manufactures	£59,708	.....	.....
Pork, wet, salted	4,664 barrels, £17,024	.....	.....
Manure, Guano	.....	7,000 tons, £70,000	.....
Rice	5,553,514 lbs., £32,143	9,722,620 lbs., £48,613	11,503,206 lbs., £66,641
Soap	2,167,434 lbs., £26,362	.....	.....
Lumber	.....	6,680,382 feet, £13,361	7,219,839 feet P. and W. Pine, £20,008
Leather	.....	.....	£27,544

In the three leading British West India Islands the following were the import duties charged on the undermentioned articles :—

——	Jamaica.	Barbadoes.	Trinidad.
Iron and Ironmongery	Part free; part 12½ per 100. 10 per 100 additional on all duties	3 per 100 20 per 100 additional on all d't's.	5 per 100
Machinery	12½ per 100 Steam engines free do do	do do	3½ per 100
Leather	12½ per 100— do do	do do	5 per 100 Gloves, 10 per 100
Oils	3d. to 9d. per gallon	Kerosine, 2d. per gallon Other kinds, 3 per 100 ad valorem	Olive, 9d. per gallon, Other kinds, 3½ per 100 ad valorem
Candles	Tallow, 7s. per cwt., Other kinds, 10s. per cwt.	Tallow, 4s. 8d. per cwt. Other kinds, 9s. 4d. do	Tallow, 2s. 4d. per cwt Other kinds, 6s. 8½d. per cwt.
Coals	Free.	2s. 1d. per ton.	In bulk, 3d. per hhd. 1s.
Soap	6s. 2d. per cwt	1s. 2d. per cwt.	1s. 1½d. per cwt.
Salt	1s. 1¼ do	Free.	3½ per 100, ad valorem
Bacon and Hams	18s. 8d. do	4s. 8d. per cwt.	4s. 8d. per cwt.
Beef and Pork (Salted)	8s. 5d. do	4s. 8d. do	4s. 8d. do
Butter	18s. 8d. do	7s. do	9s. 4d. do
Corn wheat	9d. per bushel	2½d. per bushel	2½d. per bushel
Indian Corn	4d. do	2½d. do	2½d. do
Flour	8s. per barrel	3s. 6d. per barrel	5s. per barrel

—	Jamaica.	Barbadoes.	Trinidad.
Fish (dried)	Cod-fish, 3s. 6d. per cwt. Other, 2s. 6d. do	2d. per cwt.	1s. 1½d. per cwt.
Fish (pickled)	2s. to 10s. 6d. per barrel	4d. per barrel	2s. 6d. per barrel
Pickles and Sauces	12½ per 100, ad valorem	3 per 100, ad valorem	3½ per 100 ad valorem
Beer and Ale (in wood)	6d. per gallon	¾d per gallon.	2d. per gallon
do (in bottle)	1s. per dozen	3s. per dozen	6d. per dozen
Spirits	10s. per gallon	2s. to 3s. 4d per gallon.	6s. per gallon
Wines (in wood)	2s. 6d. per gallon	15 per 100, ad valorem.	2d. to 1s. per gallon
Wines (in bottle)	5s. per dozen	do do	4s. to 6s. per dozen
Tobacco (unmanufactured)	6d. per lb.	2½d. per lb.	4½d. per lb.
Tobacco (manufactured)	1s. do	do	6d. do
Cigars	5s. do	25s. per 1000	9d. do
Paper and Stationery	12½ per 100, ad valorem	3 per 100, ad valorem	3½ per 100, ad valorem
Books	Free.	Free.	Free.

The yearly total values of exports from the British West India Islands have been as follows :—

	Sterling.
1862	£4,925,069
1863	6,140,584
1864	8,487,712
1865	5,946,926
1866	4,879,648
1867	4,573,472
1868	4,844,862
1869	4,758,417

In 1869 the Exports of the British West India Islands, taken separately, are valued as follows:—

—	Total Exports.	Exports to Great Britain.
	Sterling.	Sterling.
Bahamas	£163,002	£32,045
Turk's Island	35,508	37
Jamaica	1,162,769	848,961
Virgin Islands	8,210	.....
St. Christopher	206,550	161,226
Nevis	57,660	40,037
Antigua	200,973	177,687
Montserrat	43,133	40,209
Dominica	57,831	53,569
St. Lucia	118,164	111,940
St. Vincent	191,745	168,623
Barbadoes	935,425	447,706
Grenada	121,992	104,448
Tobago	74,223	71,274
Trinidad	1,381,232	1,170,187

Notwithstanding that the imports and exports of the British West India Islands in 1869 amounted to—

Imports	£4,532,962	=	about	$22,500,000
Exports	4,758,417	=	,, ...	23,750,000

they were slight, in comparison with those of the Spanish West India Islands.

In 1864 the imports and exports of the latter were as follows :—

Imports	$139,922,207
Exports	171,412,100

The Island of Cuba figuring as follows in this commercial movement :—

Imports	$129,542,383
Exports	166,446,718

The undersigned has not been able to procure the exact figures of the imports and exports of all the Spanish West India Islands for the years 1869 and 1870, but he has assured himself that the exports of sugar and molasses alone from Cuba, in 1870, exceeded £13,000,000 = $65,000,000.

Moreover, the exports from Porto Rico in 1871, compared with those of 1867, give the following results :—

	1867.		1871.
Sugar	1,327,667	.....	2,127,667 quintals.
Molasses.....	5,067,094	....	7,590,915 gallons.
Coffee	207,343	.....	210,668 quintals.

The total imports and exports of Porto Rico were :—

	1869.		1870.
Imports	$16,000,000	.....	$15,000,000
Exports	12,000,000	.....	14,500,000

These statements, for which the undersigned is partly indebted to His Excellency the Consul General for Spain at the Port of Quebec, were accompanied by the remark, that a similar progressive increase is observed in the trade of Cuba, from which it seems more than probable that the total sum of the Spanish West Indian imports and exports for 1871 is far in excess of that given for 1864.

The population of Porto Rico is about 630,000, and that of Cuba 1,200,000.

It is therefore important, when considering the question of more frequent commercial relations between Canada and the Antilles, to keep in view the extensive trade of the Spanish West India Islands, and to weigh the fact that, whilst the products of our fields, forests, mines, fisheries and manufactures may find an advantageous outlet in the British West India Islands, the market they would find in the Spanish West India Islands is much more considerable.

The only important difficulty which present itself to this trade, is the system of differential duties imposed in the Spanish West India Islands in favor of vessels flying the national flag. These exceptional duties are often excessive, as may be judged from the following table, which shows the duties levied in the year 1871 on certain articles when imported by vessels under the Spanish flag, and the duties charged on the same articles when imported in vessels flying a foreign flag.

Articles.	Spanish Flag. Rate of Duty.		Foreign Flag. Rate of Duty.
	$ cts.		$ cts.
Ale, British (bottled)	0 38	per Imperial gallon	0 48
Apples	1 15	,, barrel	1 47¼
Bacon	2 87½	,, quintal	3 84¼
Beans	0 20¾	,, arroba	0 28⅛
Bran	0 44¼	,, quintal	0 64¾
Brooms	2 76		3 68
Butter	5 22⅛	per quintal, including weight of jars	6 67
Candles (Composition)	6 48	,, quintal	8 64
Cheese (American)	2 87½	,, do	3 84¼
Coals	0 48¾	,, English ton	0 61
Coal Oil	2 20¾	,, quintal	2 94½
Cod-fish (Newfoundland)	0 82¾	,, do	1 12½
Empty Casks	0 34¾	each	0 45¾
Corn	0 12½	per arroba	0 16⅓
Flour	4 32	,, barrel of 8 arroba, weight of barrel included	5 06¾
Gin	0 04¾	,, litre	0 05⅞
Hams (American)	2 87½	,, quintal	3 84½
Hay	0 36¾	,, do	0 46
Herrings	0 82¾	,, do	1 12⅜
Lard	3 35¼	,, do	4 48½
Lumber	4 80	,, M feet	6 40
Oats	0 48¼	,, quintal	0 64¾
Onions	0 48¼	,, do	0 64¾
Paper (wrapping)	1 31	,, do	1 74
Pickles	2 87½	,, do including weight of jar	3 65¾
Plaster	0 16½	,, quintal	0 23
Potatoes	0 48¼	,, do	0 64¾

It is therefore apparent that should the Government of Canada subsidize a line of steamers between Canada and the Spanish West Indies, it would be for the benefit of Canadian commerce that such steamers should sail under the Spanish flag.

The undersigned has therefore the honor to recommend that Parliament be asked to place at the disposal of the Government of Canada, the sum of sixty thousand dollars ($60,000) to enable it to subsidize, during 1872-3, one or more lines of steamers, to ply between the British and Spanish West India Islands, or one or the other of them, and the Dominion of Canada; such steamers to call at Halifax, Nova Scotia, on each voyage to and from Quebec, except during the winter months, when they will ply between the West Indies and Halifax in Nova Scotia, or Saint John, New Brunswick, as may be arranged with the owners of the steamers, and that any contracts made with such steamship lines shall be for a term of three or five years, as may be deemed most expedient.

Respectfully submitted.

(Signed,) HECTOR L. LANGEVIN,
Minister of Public Works.

(Copy.)

The establishment of direct mail communication by steamers between Canada and the British West Indies would tend beyond doubt to augment trade intercourse between the two countries, and I concur with Mr. Langevin in thinking that a line of steamers,

under the Spanish flag, to Cuba, would also be very valuable adjuncts to the commercial facilities of the Dominion. No practical proposition to establish such a line has been submitted to the Government however, and I think that that should be the first step in the matter. With a company of sufficient resources to construct and run suitable steamers for such a line, the Government would have no difficulty in negotiating at any time, should they be so disposed, without having any actual money voted by Parliament in advance.

Acting upon the suggestions of the West Indies Commissioners, Mr. Barr, Member of the Court of Policy of Demerara, made, in 1869, on behalf of the Government of that Colony, a proposal to me, which was in substance, that if Canada would establish a monthly line of steamers from Halifax to Demerara, touching at Barbadoes each way, they would contribute one-half the necessary subsidy. Barbadoes, Mr. Barr thought, would also contribute, though this was, of course, mere matter of opinion. I had repeated interviews with Mr. Barr, and also separately or with him, saw Mr. (now Sir Hugh) Allan as to the cost of such a line to the Governments concerned. The recommendation of the West Indies Commissioners on the subject was,—"To establish promptly a line of steamers, suitable for the carriage of mails, passengers and freight, between Halifax, Nova Scotia, and St Thomas, in the West Indies, touching (until the completion of the Intercolonial Railway) at Portland, in the United States, so as to ensure regular semi-monthly communication between the ports mentioned," and I was exceedingly anxious to forward the matter. There were, however, considerations connected with the then expected union of Newfoundland with the Dominion, which rendered a postponement expedient. That colony desired as part of the terms of union—should one be made—that a monthly line from St. John to England, and a fortnightly one to Halifax and Quebec, should be established, and they also desired to be put in communication with the West Indies. These necessities, I found, could have been conveniently worked in with the original proposition of a line from Halifax to Demerara, and, in the hope of their making a union more advantageous, I postponed for the time—after submitting the matter to the Premier of the Government—making any recommendation on the subject.

The simple monthly service from Halifax to Demerara would at the time have been undertaken by Mr. Allan for £1,000 a voyage.

I am of opinion that communication should be had with the Governments of Demerara and Barbadoes, and that if they are willing to contribute towards the necessary subsidy, I should be authorized to negotiate with the owners of lines of steamers on the Atlantic for a monthly line from Halifax to Demerara.

The line under a Spanish flag to Cuba would necessarily have to be a separate one, and I think it might be intimated that the Government were willing to consider propositions for the establishment of such a line.

(Signed,) A. Campbell.

I agree and concur.

(Signed,) Hector L. Langevin,
Minister Public Works.

17th May, 1872.

Supplementary Return; [*Not Printed, in accordance with the recommendation of the Joint Committee on Printing.*]

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 23rd May, 1872;—For the Report and Estimates relating to the Bay Verte Canal.

By Command.

J. C. AIKINS,
Secretary of State.

Department of the Secretary of State,
OTTAWA, 1st June, 1872.

OTTAWA, 31st May, 1872.

Enclose address out of 23,188, and copy 22,692.

SIR,—I have the honor to transmit herewith copy of Report and Estimates relating to the Bay Verte Canal, asked for by the accompanying Address of the House of Commons dated the 23rd May, 1872.

I have the honor to be, Sir.
Your Obedient Servant,
J. BRAUN,
Secretary.

The Honorable Secretary of State
for Canada, Ottawa.

(Copied from No. 22,692.)

REPORT OF THE BAIE VERTE CANAL SURVEY, 1870–1871.

OTTAWA, 8th April, 1871.

SIR,—I have the honor to transmit you herewith the general map, plans and profiles, showing the routes examined for the projected Baie Verte Ship Canal across the Isthmus between Cumberland Basin at the head of the Bay of Fundy and Baie Verte on the Gulf of St. Lawrence.

The survey, upon which the following report is now submitted for your consideration, embraces all the routes you instructed me to explore, and their termini in both bays, as far as the line of three fathoms of water in depth or more at lowest tides. It extends over an area of 200 square miles; the field work was commenced in August, 1870, and completed in June, 1871.

Map.

Having been unable to procure any correct map showing the general features of the country to be traversed by the projected canal, these had to be determined by means of a regular trigonometrical survey; the map furnished shows nothing but what has been thus

established. It has been drawn to a scale of 800 feet per inch, and measures 15ft × 5ft; although the smallest scale that could conveniently be used for the purpose intended, has been adopted, it does not embrace all that has been surveyed, the width of the paper being insufficient. The proportions of survey not shown are the branches of the River Tintamarre, as far as Gravelly and Long Lakes, and the main trunk of the River Gaspereau to the upper end of Lowther's lake.

The various lines measured and levelled are drawn in *green*, the distances being marked in the same color, and the relative corresponding elevations of the ground indicated by red figures.

The red dotted lines indicate the probable location of each route in order to obtain the best curves, lowest ground and proper termini in each case.

The full line, in red lead, represents the route recommended for the canal.

The soundings of the Bay of Fundy and Baie Verte are referred to extreme low water in each bay, the blue figures indicating the depth of water below this level, and the yellow figures, the elevation of the bottom of the sea above it.

The depth of water in the lakes is marked in black.

Profiles.

These are drawn to a scale of 400 feet horizontal, and 20 feet vertical per inch.

The datum line adopted for all the levels shown on the map and profiles is 50 feet below ordinary low water of spring tides of the Bay of Fundy.

The profiles show the probable nature of the material to be excavated according to borings made by means of iron rods with bits and augurs. The rock surface so determined must only be considered as approximate, as it is quite possible that the boring rods may in some cases have struck boulders instead of solid rock.

General description of Isthmus.

The general course of the Isthmus from the Bay of Fundy to Baie Verte is westerly, and its length on a straight line across the narrowest part is 15¼ miles; it is bounded towards the north by the high lands, extending from Sackville to the head of the River Gaspereau at Lowther's lake, and towards the south by those extending from Amherst to the River Tidinsh; its breadth on the Bay of Fundy, from Sackville to Amherst, is 9 miles, and on Bay Verte from Port Elgin near the mouth of the Gaspereau, to the Tidinsh, 4⅓ miles.

The eastern section of this tract of country is occupied chiefly by uplands, which attain their greatest elevation at Mount Uniacke, whence they incline northward to the Gaspereau, southward to the Tidinsh, eastward to Baie Verte and westward to the Cumberland bogs and lakes. From the summit of this mount the view extends over the entire Bay eastward as far as Northumberland Straits and Prince Edward's Island, and across the low lands westward as far as Amherst and Mount Whatley on Cumberland Basin.

The western section is occupied by extensive bogs, marshes and numerous lakes in the valleys of the streams which discharge into the Bay of Fundy; these valleys are separated from each other by tracks of higher land, the most elevated of which is that whereupon the post road is located from the Fort Cumberland to Baie Verte Village; its most prominent points command a general view of the low land section on either side.

The general direction of the high land dividing the waters which flow into the Gulf from those waters that flow into the Bay of Fundy is from north to south, and covers a breadth of about 9½ miles from the Baie Verte shore.

Rivers.

The principal streams emptying into Baie Verte are the Gaspereau on the north side, and the Tidinish on the south side; the tide flows up the former a distance of two

and a quarter miles, or as far as Turner's mill dam, and up the latter as far as Doyle's mill dam, a distance of three and two-thirds miles. Prior to the erection of this dam it ascended about one and a half miles farther.

Those discharging into Cumberland Basin are the Rivers Hebert Macan and Napan, some seven miles above Amherst, and the La Planche Missiquash, Au Lac and Tintamarre between Amherst and Sackville.

The three former were not surveyed, not being on the isthmus. The outlets of the La Planche and Missiquash are at three and a half miles below Amherst, and are so contiguous to each other that they will essentially merge into one entrance; the outlets of the Au Lac and Tintamarre are one and three quarter north-west of Fort Cumberland, or three miles below Sackville, and are close to each other.

The tides have been shut out from La Planche and Au Lac by means of dams with tide gates called Aboideause; but before these were constructed, they followed up the Au Lac a distance of about seven miles, and up the La Planche eight miles or more towards McLellan's mill and Long Lake. They ascend the Missiquash as far as the Black Island bogs and lakes, a distance of more than seven miles, and up the Tintamarre to Gravelly and Long Lakes about seven miles above Sackville. The tides are allowed to flow up the two last named rivers as far as they can reach, and new channels have been cut to conduct them still further, in order that the Bay of Fundy mud deposits may form new marsh land in the shallow lakes and on the surrounding bogs and swamps.

Marshes, Bogs, Dykes, &c.

The surface of the marshes and bogs around Cumberland Basin is from one to three feet lower than the average range of the Bay of Fundy spring tides, for more than seven miles inland; the average tidal range here referred to is 89·77 feet above the datum adopted for all the levels as already explained. The original settlers found it necessary therefore to exclude the sea water from these low lands by constructing dykes near the margin of the bay and along all the streams subject to the influence of the tides, these dykes extend several miles inland, and now enclose vast tracts of rich alluvial meadow land; the undyked portions are covered with coarse grasses and are unproductive; the extent of these dykes along the various streams from their mouth upward is shown on the map.

Beyond the dyked marshes the low land is generally wet and boggy, especially near the lakes; in the Valley of the Missiquash, these bogs commenced five miles from the outlet of that river, and extend seven miles or more further up; they consist of decayed vegetable matter saturated with water and covered with coarse grasses or moss, varying from four to eight feet in thickness. This crust of semi-fluid muck rests upon clay, or sand and clay of a compact nature, below which rock is found at various points at depths varying from nineteen to twenty-four feet, whilst at other points an understratum of hard black muck of a peaty nature is found below the first layer of clay and land at of depths of from thirteen to twenty-four feet below the top surface of the bog. This peaty understratum which rests chiefly on hard white sand, has been also found beneath the soil of the dyked marshes at depths varying from fifteen to twenty-five feet below their surface: it appears to extend for a distance of about nine miles from the Bay of Fundy eastward, and to have a thickness of from one to four feet as shown by the profile of the Missiquash line. The same peaty substance and underlying soil crop out on the banks of Cumberland Basin, where pine and beech stumps are found imbedded in a similar description of soil near the outlets of Sharp's Creek, the River La Planche and Cumberland Creek, when the tide is out; this would lead to the supposition already made by Professor Dawson, in his Acadian Geology, that the Cumberland marshes rest on old upland surfaces, and that either a subsidence of the soil has taken place, or that the tides have increased in height.

Ridges.

Southward of the La Planche, the high land is known as Amherst ridge; the valley of this stream is separated from that of the Missiquash by the Fort Lawrence ridge;

the upland between the valley of the latter and that of the Au Lac is called the Fort Cumberland or Pont à Buot ridge. The Valley of the Au Lac is separated from that of the Tintamarre partly by Coles's Island near the post road from Sackville to the Au Lac railway station, and chiefly by what is generally known as the Jolicœur Ridge.

These ridges and the Sackville uplands together with the uplands around Baie Verte are well settled for the greatest part.

Routes Explored.

Several lines have been examined for the projected canal across the Isthmus, and the bays at both ends have been carefully sounded in order to determine the best location with respect to the lowest ground, the nature and quality of the material to be excavated, the proper termini in the Gulf and in the Bay of Fundy, and the water supply.

The following is a general description of each line.

The Sharp's Creek line commences at its western terminus in Cumberland Basin, at a distance of one-and-a-quarter miles below the mouth of Sharp's Creek, at the level of ordinary low water, whence it strikes the shore between the La Planche and Sharp's Creek at three-fourths of a mile below the entrance of the latter; thence, with the requisite curves, it traverses the marshes eastward between Amherst ridge and the La Planche, crosses the Post Road, Intercolonial Railway and Eddy Road at about half a mile north from Amherst, and continues thence in a direct line, crossing the last named stream several times, until it connects with the La Planche line at a distance of eight and six-tenths miles from Station Zero on the shore; it afterwards follows the La Planche line towards Tidinsh and Baie Verte.

The elevation of the bed of Cumberland Basin at the Bay of Fundy terminus, at extreme low water, varies from fifty to sixty-two and eighty-eight feet above datum; the elevation of the marshes on this line to where it intersects that of the La Planche is from ninety to ninety-four above the same datum. The levels of the remainder of the Sharp's Creek line are given inthe description of the La Planche line.

The La Planche Line.

The western terminus of this line extends from the shore down the outlet of the La Planche to the ordinary low water line of Cumberland Basin in a westerly direction, and for a distance of 3,700 feet. Eastward from the shore, and southward from the Fort Lawrence ridge, the line crosses the Intercolonial Railway and Post road two miles from Amherst, and afterwards the Eddy road; thence it curves slightly along the south side of Black Point and Fox Point, and crosses the outlet of Long Lake, runs into the La Planche; thence passing about three-fourths of a mile southward of this lake, and in a north-easterly direction, it ascends the high ground which separates the waters of the La Planche from those of the Tidnish, and afterwards on a more easterly course it descends into the valley of the latter as far as the Tidnish bridge and down the south-east side of Tidnish Head at a quarter of a mile therefrom; thence the line terminates in Baie Verte at a depth of sixteen feet at extreme low water.

The elevations of the ground on this and the other lines to be described are all referred to the same station as the Sharp's Creek line, and are marked in feet; the distances are given from Station Zero at the western end of each line, and are marked in chains of one hundred feet.

Elevations and distances on La Planche Line.

The bed of the water terminus in Cumberland Basin, at extreme low water, varies between forty-seven, seventy-two, fifty and eighty-seven feet in a distance of thirty-seven chains from station zero; thence eastwards, the elevation of the marsh and bog land as far as Long Lake run at 310 chains, is from eighty-nine to ninety-five feet, and thence to the junction of the Sharp's Creek line at 400 chains it is from ninety-four to 120 feet.

From this junction to the summit level at 510 chains, the elevation of the ground increases to 130 feet; thence it decreases to eighty-one feet at 650 chains; thence to the intersection of the Au Lac line at 720 chains it varies from eighty-one to 111 feet.

From this intersection to Tidnish Bridge at 795 chains the ground is very uneven, and the levels vary from 111 to seventy-five feet; thence towards Tidnish Head at 908 chains, they vary from seventy-three to 104 and seventy-five feet; thence, or from the shore along the eastern terminus of the line, as far as sixteen feet of water in depth at extreme low water in Baie Verte, the elevation of the bed of the bay is from seventy-one to forty-nine feet at a distance of 1,000 chains from the western end of the line at Station Zero, on the shore of Cumberland Basin.

From the junction of the La Planche line with that of the Au Lac, the distances marked upon the map are given from station zero of latter line to the end of its eastern terminus in Baie Verte, and are $88\frac{1}{3}$ chains greater than those marked above.

The Missiquash Line.

The western terminus of this line on the shore of Cumberland Basin is about one quarter of a mile below the mouth of the Au Lac, and corresponds with that of the Au Lac line; thence the Missiquash line runs in a south-easterly direction across the marsh towards the base of the Fort Cumberland Heights at their western extremity, where it intersects the Intercolonial Railway; thence curving to the eastward, it cuts the Post road and Mount Whatley road and ascends the valley of the Missiquash, which it follows until it connects with the Au Lac line, which it afterwards follows, *vid* Tidnish Head, to its deep water terminus in Baie Verte.

Elevation and Distances of Missiquash Line.

Those of the western terminus seawards, being the same as upon the Au Lac line, will be given in the description of that line. The elevation of the Missiquash marshes and bogs from Cumberland Basin to the junction of the Au Lac line at $614\frac{2}{10}$ chains from station zero, varied from ninety to one hundred feet above datum. From the junction down to Tidnish Head and along the eastern terminus in Baie Verte at 996 chains from Station Zero, the elevations are the same as on the Au Lac line.

The Au Lac Line via Tidnish.

The western terminus of this line from Station Zero, $\frac{1}{4}$ of a mile below the mouth of the Au Lac, to a depth of 16 feet water at extreme low water in the Bay of Fundy, follows a westerly direction; thence or from Station Zero, which is on the shore, the line ascends the valley of the Au Lac between the south side of this river and the base of the Fort Cumberland ridge on a north-easterly course; it runs across the Intercolonial Railway and Post road between Sackville and Amherst at about 700 feet south of the Au-Lac Railway station, and intersects three cross roads from Cumberland ridge to Jolicœur ridge and Upper Sackville; it also intersects the River Au Lac westward and eastward of the last of these cross-roads which leads to the head of Jolicœur Lake; thence curving to the south-eastward it runs across the Post road between Fort Cumberland and Baie Verte at a distance of $8\frac{1}{2}$ miles, whence it passes over and between the lakes and the bogs at the head of the Missiquash line at $11\frac{6}{10}$ miles from Station Zero, and at $\frac{1}{4}$ mile south of Goose Lake, thence two courses may be followed—one to the south-eastward and the other more to the eastward, as far as $15\frac{6}{10}$ miles towards the River Tidnish. Supposing the latter course to be adopted, the line from opposite Goose Lake continues in an easterly direction as far as the thirteenth mile, at 694 chains from Station Zero, after which it takes a south-easterly course to the summit level at $787\frac{1}{2}$ chains, or at $14\frac{9}{10}$ miles; thence curving eastward towards the valley of the Tidnish, it connects with the La Planche line at $807\frac{1}{3}$ chains, it afterwards runs in a north-easterly direction to Tidnish Bridge and towards Tidnish Head, whence it terminates on an easterly course in Baie Verte at a depth of 16 feet of water at extreme low water, and at a distance of nearly $20\frac{6}{10}$ miles from Station Zero on the Bay of Fundy shore.

Elevation and Distances on the Au Lac Line via Tidnish.

At the western terminus seaward the bed of Cumberland basin is from 31 to 89 feet above datum, and the distance from Station Zero on the shore is 4,500 feet, thence eastward, the elevation of the marshes varies from 90 to 92 feet for a distance of 410 chains, or up to the road leading from Roy's Corner to the head of Jolicœur Lake; near the Baie Verte Post road at 448 chains the levels of the ground increase to 110 feet, and afterwards decrease to 96 feet towards the Province Boundary at 506 chains; thence to the Junction of the Missiquash line at $613\frac{2}{10}$ chains they vary from 96 to 99 feet; the ground thence ascends gradually until it attains an elevation of 113 feet at 685 chains; thence descending to the valley of the north-west branch of the Tidnish, the elevation decreases to 99 feet at 713 chains; and increases to 116 chains at the summit level, or at $787\frac{1}{2}$ chains; thence to the junction of the La Planche line at $807\frac{1}{3}$ chains the levels vary from 116 to 106 feet.

From the junction of the Au Lac and La Planche lines to Tidnish bridge at 882 chains the ground is very uneven and the levels vary from 111 to 75 feet; thence to Tidnish Head at 995 chains they vary from 73 to 104 feet, 75 feet thence the line terminates in Baie Verte at 1,087 chains into 16 feet depth of water, at extreme low water, and the elevation of the bed of the bay varies from 71 to 49 feet above the datum.

Au Lac Line via Baie Verte Village.

This line has already been described from the Bay of Fundy to the intersection of the Baie Verte Post road at 448 chains from Station Zero; it afterwards curves around the base of the Jolicœur ridge in an easterly direction, and around the base of Hall's Hill on a north-easterly course, passing across the head of the Missiquash bogs near the Province boundary, as far as Station 627; thence it crosses the Baie Verte Post road a second time at 632 chains or at 5 chains east from the portage bridge; thence following the Missiquash Gully, it attains the highest elevation at 691 chains or at 23 chains above Rufus Oulton's mill; whence it continues in a north-easterly direction to the west branch of Baie Verte creek at 730 chains, and at $\frac{1}{2}$ mile north of the Post road from Fort Cumberland; thence the line courses to the eastward until it reaches the Cobourg road at 801 chains; thence passing between the Methodist and Episcopal Churches of Baie Verte Village, on a south-easterly course, the line reaches Dank's Point at 900 chains, and terminates in a depth of 16 feet water, of extreme low tide, in Baie Verte at 1,090 chains from the Bay of Fundy.

Elevation and Distances on Au Lac Line via Baie Verte Village.

From the 450 chains near the intersection of the Baie Verte Post road to 475 chains on the Missiquash bog levels vary from 104 to 110 and to 97 feet, from 475 to 628 chains at the head of the Missiquash bog near the Portage bridge on the Baie Verte Post road, the ground is very uneven, and the levels vary from 93 to 112 feet; from 628 chains to the summit level at 691 chains, and 800 feet north from the post road, the levels vary from 98 to 160 feet; from the summit level to 733 chains in the valley of the west branch of Baie Verte Creek the elevation of the ground decreased from 160 to 105 feet; from 733 chains to the lower intersection of the west branch of Baie Verte Creek at 787 chains the levels vary from 105 to 119 for a distance of 10 chains, and thence to 81 at the Creek. From 787 chains to Dank's Point at 900 chains, the levels vary from 82 and 72 feet; thence to a depth of 16 feet water at extreme low water in Baie Verte, along the eastern terminus of the line which ends at 1,090 chains from Station Zero, the levels vary from 71 to 49 feet above the datum.

The Tintamarre Line.

This line at its western terminus follows the channel of the River Tintamarre in a south-westerly direction to its junction with the River Au Lac, thence it continues along the common outlet of both streams into Cumberland Basin. The breadth of the Tintamarre channel at extreme low water is from 200 to 400 feet wide to the junction of the River Au Lac, whence it increases to 700 feet, at the outlet into Cumberland Basin.

From the eastern shore of the Tintamarre or from Station Zero, the line runs on a straight course eastward across the Intercolonial Railway, the adjoining Post road and two cross roads from the Baie Verte road to the Jolicœur road, and terminates at 384 chains where it joins the Au Lac line a short distance below the road leading to the head of Jolicœur Lake.

The first 220 chains are upon the Tintamarre marsh north of the River Au Lac; the remainder of the line is in the valley of the Au Lac, between Fort Cumberland and Jolicœur ridges, where it cuts the La Courve stream from the Jolicœur Lake and bogs, and also the main stream of the Au Lac several times.

From 384 chains the Tintamarre line follows that of the Au Lac to Baie Verte Village or to Tidnish.

Elevation on the Tintamarre Line.

The depth of water in the channel of the Tintamarre and Au Lac varies from 6 to 18 ft. at extreme low water into Cumberland Basin. From Station Zero on the shore of the junction of the Au Lac line, the elevation of the ground is generally from 90 to 92 feet.

Bay of Fundy.

According to the sailing directions published in 1866 "Ships navigating the Bay "of Fundy have to encounter an atmosphere almost constantly enveloped in dense fogs, "the tides setting with great rapidity over the rocks and shoals with which it abounds, "and a difficulty of obtaining anchorage on account of the depth; so that, under these "circumstances, the most unremitting attention is requisite to prevent the disastrous "consequences which must necessarily attend a want of knowledge and caution."

From St. John to the entrance of the River Au Lac, on Cumberland Basin, the course of the bay is north-eastward, and the total distance on a direct line is about 100 miles; the breadth across from St. John to the entrance of Didby Gut is nearly 41 miles.

At Cape Chignecto at the junction of the Chignecto Channel, and the branch leading easterly to the Basin of Minas, or at 55 miles above St. John, the entire breadth of the Bay is 30 miles, the entrance of the Chignecto channel being 15½ miles from the Cape to the north shore. The depth of water from St. John to this channel varies from 50 to 20 fathoms, and the current is at the rate of 1½ knots per hour.

At Cape Enragé, on the north side of the bay at 70 miles above St. John, the distance across the Chifinecto channel is 5½ miles, the depth varies from 20 to 30 fathoms, and the current from 1½ to 2 knots.

From Cape Enragé to Grindstone Island, on the west side of the common outlet of the Petitcodia, and Memramcook Rivers, at a distance of 12¾ miles farther eastward, the depth of water at centre of the channel is from 20 fathoms to 6, and the breadth across from the north to the south shore is about 6 miles.

From Grindstone Island across, the mouth of the last named rivers to Cape Maringouin 3¾ miles upwards, the depth is from 6 to 5 fathoms.

The velocity of the current from Cape Enragé to the latter is from 2 to 3 knots, except off Grindstone Island, where it runs from 2 to 4 knots an hour.

At Cape Maringouin, 85 miles above St. John, the Chignecto channel divides into two branches, the one running northerly up the River Petitcodiac, and the other north-easterly to Cumberland Basin; the latter is 1½ miles wide, and 5 to 12 fathoms deep across to Boss Point, and the current is at the rate of 4 knots.

From Cape Maringouin to Woody Point, at 97 miles from St. John, the depth varies from 5 to 3 fathoms; the breath of the navigable channel is from 1½ to 1⅓ miles, and the current from 4 to 5 knots.

From Woody Point to the mouth of River Au Lac. at 100 miles, the channel is about ¼ mile wide, and 5 to 2½ fathoms in depth.

Thence south eastward up Cumberland Basin, towards Sharp's Creek, the distance is 4½ miles, and the depth diminishes to almost nothing at extreme low water, which is about 3 feet below ordinary low water; the depths stated in the foregoing are referred to

the latter or to low water of ordinary spring tides; the distances are expressed in statute miles.

Anchorage, Bay of Fundy.

See Admiralty sailing directions, published in 1866, 1867.

"Temporary anchorage may be obtained in moderate weather along the whole extent of coast between Cape Spencer, 10 miles S.E. of St. John and Cape St. Mary, on the south point of the outlet of Shepody River, west of Grindstone Island.

There is an anchorage in 4 fathoms of water to the northward of Grindstone Island, between it and the mouth of the Shepody, on the west side of the Petitco, but it is somewhat difficult of approach, and the holding ground is not good. There is another anchorage to the N.E. of the Island by which is frequently used in about 3 fathoms, a short $\frac{1}{2}$ mile N.E + E. from its eastern point.

Eastward from Pick point, 2 miles N.E. from Cape Maringouin to Woody point, on the north shore of the channel leading to Cumberland Basin, vessels may anchor any where except during strong westerly winds, which frequently occur when the ebb stream, which attains a velocity of 4 or 5 knots an hour, causes a very disagreeable sea."

"Both branches of the Chignecto channel are encumbered by extensive flats of quick sand and mud, many of which are left dry at low water, and require careful pilot navigation."

Winds.

"The prevailing winds throughout the whole coast of Nova Scotia are from W.S.W. to S.W., nearly as steady as trade winds, except during the summer months, when they become rather more southerly, accompanied with but little intermission of fog, which requires a north-westerly wind to disperse." (See Sailing Directions, published in 1866.)

Local Information respecting Bay of Fundy.

The bed of the channel from Woody Point upward is from 1 to 2 feet deeper in April, May and June, than what it is from June to November.

Navigation opens towards 1st April; it closes between 15th November and 1st December for ship navigation, and towards Christmas for the navigation of coasting vessels. Between 1855 and 1857 navigation opened on 18th April, when a vessel was fast in the ice between Cape Enrage and the Joggings; this may happen once in 10 years. Floating ice was seen on the 7th May same year, but this may occur once in 70 years.

The prevailing winds during the season of navigation are S.W. to W., and in April and October they are north-easterly, after the equinoxes; in November the winds are N.N.E. and westerly, but chiefly westerly.

The calmest months are the latter half of May, June and July; the worst months for wind are the latter halt of September, October and November.

Baie Verte.

The following is from the St. Lawrence Pilot, published by order of the Admiralty:

"Baie Verte is 9 miles wide across its entrance from Indian Point at the southern extremity of the promontory called Cape Tonnentine, in New Brunswick, to Cold Spring Head in Nova Scotia, but contracts to the breadth of $2\frac{1}{2}$ miles near its head. It is 11 miles deep, and separates the Province of New Brunswick from that of Nova Scotia; their boundary continuing across the isthmus from the head of Baie Verte to Cumberland Basin.

Baie Verte is completely open to easterly winds, as well as very shallow near its head, where flats of mud and weeds dry out to a distance of $\frac{3}{4}$ mile from the shore. It was formerly erroneously represented as being free from danger, with mud bottom, shoaling gradually to its head. The Admiralty survey has in great part deprived it of that character by the discovery of the following dangerous rocky shoals lying directly in the way of vessels entering the bay."

Proceeding south-westward across the entrance of the bay, these shoals are the Spear shoal, having a patch of rock with 10 feet least water near its east end ; the Heart Shoal lying about a mile W.N.W. from the Spear Shoal, and S.W. by S. 1¼ miles from Cape Spear has 9 feet water, and 15 feet between it and the shore ; the Laurent Shoal, of rock and sand, with 16 feet least water, is about ¾ mile long by half that distance in breadth ; this shoal is bold on the east side, where there are 4¼ fathoms close to ; the Aggermore rock, with 18 feet least water, and bearing N.E. ½ E., 2¾ miles from Cold Spring head, is, like the Laurent shoal, merely one of the shallowest points of an extensive rocky bank, which is thinly covered with mud and sand, and which extends out from Cape St. Laurent and Ephraim Island, in a S.E. direction, so as to leave a deep channel, about 2 miles, between it and Cold Spring Head.

At low water, not more than 3½ fathoms could be safely reckoned upon, in running between the Aggermore rock and the Laurent Shoal, or between the latter and the Ephraim banks, extending off the northern shore.

Between Boss and Jackson Points, there is a dangerous shoal called Boss's sandspit, extending ¾ mile from the south shore at 3¼ miles to the north-west from Cold Spring head. This spit dries out to its edge, and is so steep too, that there are 17 feet water close to its outer point.

The depth of water between these shoals and Jackson's Point varies from 3¾ to 6 and 3¼ fathoms ; from Jackson's Point midway towards Tidnish Head it decreases to 2¾ fathoms. Further up the bay there are two patches of stone with 3 and 5 feet water at the distance of ½ and ¾ of a mile N.N.E. ½ E. from Tidnish Head ; the depth of water at about 1¼ mile northward from the shore is 2 fathoms ; thence it diminishes gradually towards the head of the bay.

Local Information respecting Baie Verte.

Navigation opens sometimes on 1st March, but generally on 1st April, and closes towards 30th November.

The most prevalent winds are S.W. in spring, S. to S.W. in summer, and N.W. in autumn. Easterly winds are not of frequent occurrence ; the worst winds causing the roughest sea are from the E. and S. E.

There is less water in the bay than 30 years ago ; between Jackson's and Weeks' Points, the bottom was of clay, and is now covered over with sand one foot in depth ; one of the worst parts for sand is about one mile out from Weeks' Point. Towards the entrance of the Tidnish there are oyster and mussel beds.

FRESH WATER DISCHARGES FRCM RIVERS AND LAKES.

The volumes of fresh water discharged by each of the streams was measured in August, 1870, after a succession ot several weeks of very dry weather, and may therefore be considered as a minimum, is as follows :—

	Cubic Feet per Section.
Gaspereau	9·23
Tidnish	10·11
Tintamarre	24·17
Au Lac (almost dry)	0·00
Missiquash	11·30
La Planche	11·54
Total per second	66·35

Equal to 3,981 cubic feet per minute.

The general surface elevation of the streams and lakes available for the supply of a canal across the isthmus, is scarcely above the level of the highest spring tide of the Bay of Fundy, Square Lake, or Lowther's Lake at the head of the Gaspereau, is about 50

feet above this level, its depth is about 14 feet, and it covers an area of nearly half a square mile.

The supply that could, under any circumstances, be derived for navigation from any of these sources is so small compared to what will be required, and would be so soon exhausted that its use would not warrant the expenditure necessary to obtain it.

TIDAL FLUCTUATIONS,

Bay of Fundy and Baie Verte.

The variations of the tide were noted every five minutes each day in both bays, except when stormy weather or other obstacles prevented, by means of guages divided into feet and tenths from low water level upwards. The Bay of Fundy gauges were placed near the mouth of the Au Lac, the Baie Verte tide gauges next in the Tidnish Bridge, one and a quarter miles from the outlet of the same. At the Bay of Fundy the tide register was kept from 13th August, 1870, to 21st January, 1871, when the guages were broken down by floating ice; at Baie Verte it was kept from 10th August, 1870, to 1st June, 1871. According to these registers and other observations the tidal fluctuations affecting the practicability of the canal may be enumerated as follows, viz. :—

Bay of Fundy Tidal Observations,

13th August, 1870, to 11th January, 1871.

	Elevation above Datum. Feet.
High water sax by tidal wave, October, 1869	100·00
Highest water observed during survey, 25th October, 1870	96·00
Average maximum range of high water, taking the highest spring tide of each month	94·08
Average mean range of high water, taking the average of high water of every day of each month	89·77
Average minimum range of high water, taking the lowest neap tide of each month	85·71
Average maximum range of low water, taking its highest elevation of each month	57·13
Average mean range of low water, taking the average low water of each month	52·90
Average minimum range of low water, taking the lowest tide of each month	48·26
Ordinary low water spring tides	50·00
Extreme	47·20
	Feet.
Spring tides rise—per Bayfield	45.25
Neap	38.00

N. B.—High water, Bay of Fundy, remains stationary from 15 to 20 minutes.

Baie Verte Tidal Observations,

11th August, 1870, to 1st June, 1871.

Highest tide observed prior to survey	77·60
do do 29th December, 1870	77·37
Average maximum range of high water, taking the highest spring tide of each month	75·75

Average mean range of high water, taking the average of high water of every day of each month	73·93
Average minimum range of high water, taking the lowest neap tide of each month	72·15
Average maximum range of low water, taking the highest elevation of each month..	70·66
Average mean range of low water, taking the average low water of each month, or ordinary low water	69·28
Average minimum range of low water, taking the lowest tide of each month	67·85
Lowest water observed 30th September, 1870	66·87
Extreme low water, according to local information,—Baie Verte soundings are referred to this line	65·57

	Feet.
Rise of extreme spring tides, or greatest variation observed between extreme high and extreme low water	10·50
Difference between lowest tide observed, and average maximum of spring tides.....	8·88
Spring tides rise—per Bayfield	9·00
Neap do do	5·00

COMPARISON of tidal fluctuations, Bay of Fundy and Baie Verte, shewing difference of elevation between both bays at high water and low water, affecting the question of lockage.

High Water.	Above Datum.		Elevation Bay of Fundy above Baie Verte.
	Bay of Fundy.	Baie Verte.	
Highest known tides	100·00	77·60	22·40
Highest water observed during survey	96·00	77·37	18·63
Maximum range of high water	94·08	75·75	18·33
Mean do do	89·77	73·93	15·84
Minimum do do	85·71	72·15	13·56
Low Water.			**Elevation Baie Verte above Bay of Fundy.**
Lowest water, according to local information	47·20	65·57	18·37
do observed during survey	47·20	66·87	19·67
Maximum range of low water	57·13	70·66	13·53
Mean do do	52·90	69·28	16·38
Minimum do do	48·26	67 85	19·59

Any further details respecting the rise and fall of the tides may be obtained by reference to the summary appended to this Report, pages 39 and 40, and to the tide guage register books.

AUGUST, 1870 TO JANUARY, 1871.—Longest duration of the lowest range of high water observed during 4½ months.

Date.	Feet above Datum.	Length of time the water remained above elevation of 85 feet over Datum.
13th August, 1870	90·4	2·38
14th do	90·2	2·36
15th do	88·9	2·25
16th do	88·4	2·15
17th do	87·5	1·55
18th do	87·7	2·0
19th do	85·6	1·0
20th do	85·0	0·0
21st do	85·0	0·0
22nd do	85·5	1·5
23rd do	86·0	1·30
24th do	86·5	1·35
25th do	88·2	2·10
26th do	89·7	2·30
27th do	90·9	2·40
28th do	91·5	2·55
29th do	92·5	3·5

Rise of extreme spring tides, or greatest variation observed between extreme high and extreme low water	48·80
Difference between lowest tide observed and average maximum of spring tides	46·88
Spring tides—rise per Bayfield.....	45.25
Neap	38·00

Difference of time of high and low water at Baie Verte, St. John and Cumberland Lakes.

According to calculation the difference is as follows, viz. :—

	H.	M.
Earlier at Baie Verte than St. John	2	22
„ St. John than Cumberland Basin	0	38
„ Baie Verte „ „	3	00

According to simultaneous observations made at each place, the difference is

	H.	M.
Earlier at Baie Verte than St. John	2	00
„ St. John than Cumberland Basin	0	30
„ Baie Verte „	2	30

ELEVATION of Bay of Fundy Tides above ordinary low water, according to tide guage, half a mile below mouth of the River Au Lac, from 13th August, 1870, to 21st January, 1871 :—

Year and Month.	High Water.			Low Water.		
	Maximum	Mean.	Minimum.	Maximum	Mean.	Minimum.
1870.						
August	42·50	38·70	35·00	Lower section of guage destroyed by vessel.		
September	44·65	40·44	35·00	5·75	0·38	—2·75
October.....	46·05	40·35	35·00	8·50	3·07	—2·60
November	44·50	39·98	36·20	7·30	4·40	—1·00
December.....	44·20	39·92	37·10	7·00	3·76	—0·60
1871.						
January	42·60	39·25	36·00	Lower section of guage destroyed by ice.		
	264·50	238·64	214·30	28·55	11·61	—6·95
Average	44·08	39·77	35·71	7·13	2·90	—1·74

N.B.—2·75 feet added to the above figures in each column will show elevation of tides above extreme low water.

50·00 feet added to the same figures will show elevation of tides above the datum line to which the levels of the canal lines have been referred.

The zero of the Bay of Fundy guage was placed at ordinary low water of spring tides, and the datum 50 feet below that level.

Extreme low water of spring tides is 2.75 feet below zero of guage.

The soundings in the Bay of Fundy have been referred to extreme low water.

ELEVATION of Baie Verte Tides above extreme low water of Baie Verte, to which line the soundings of that Bay have been referred. From 11th August, 1870, to 1st June, 1871.

Year and Month.	High Water.			Low Water.		
	Maximum	Mean.	Minimum.	Maximum	Mean.	Minimum.
1870.						
August	9·45	8·40	6·95	3·60	2·69	1·60
September	9·66	8·32	6·10	4·17	2·40	1·30
October	11·00	8·00	5·30	4·00	2·90	1·41
November	10·00	8·30	6·50	4·30	3·10	1·70
December	11·80	8·83	7·18	5·53	3·64	2·08
1871.						
January	9·38	7·76	5·83	5·63	3·82	2·63
February	9·38	8·32	6·61	5·95	4·81	3·45
March	10·08	8·41	7·18	6·00	5·07	4·00
April	10·20	8·66	7·03	5·85	4·50	2·60
May	10·80	8·56	7·10	5·85	4·19	2·05
	101·75	83·56	65·78	50·93	37·12	22·82
Mean for 10 months	10·18	8·36	6·58	5·09	3·71	2·28

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Elevation of Baie Verte Tides above ordinary low water of Spring Tides in the Bay of Fundy.

1870.						
August	25·02	23·97	22·52	19·17	18·26	17·17
September	25·23	23·89	21·67	19·74	17·97	16·87
October	26·57	23·57	28·87	19·57	18·47	16·98
November	25·57	23·87	22·17	19·87	18·67	17·27
December	27·37	24·40	22·75	21·15	19·21	17·65
1871.						
January	24·95	23 33	21·40	21·20	19·39	18·20
February	24·95	23·89	22·18	21·52	20·38	19·02
March	25·65	23·98	22·75	21·57	20·64	19·57
April	25·77	24·23	22·60	21·42	20·07	18·17
May	26·37	24·13	22·67	21·42	19·76	17·62
	257·45	239·26	221·58	206·63	192·82	178·52
Mean for 10 months	25·75	23·93	22·15	20·66	19·28	17·85

N.B.—2·75 feet added to elevations above ordinary low water, Bay of Fundy, will give elevation above extreme low water of that Bay.

Mud Deposits, Bay of Fundy.

The waters of the Bay of Fundy are highly charged with mud and sand washed by the sea from the red sandstone cliffs and the banks on the borders of the bay.

During the first four hours or more of the rise of the tide, and during the last four hours of its fall, these waters contain so much sediment that they cannot be then used for a canal.

According to the tidal fluctuations observed, the Bay of Fundy waters are available for feeding a canal only when the tide is at least eighty-five feet above datum.

In the event of any lock being placed, or any channel being dredged below the level of extreme low water, provision will have to be made for the purpose of cleaning out the

bottom of the lock chamber, so as to ensure the proper working of the lock gates, and a dredge may be required for cleaning out the channel.

Source of Supply Recomended.

From the foregoing data, it is evident that the only source of supply adequate to the requirements of a ship canal is the Bay of Fundy.

Under the above circumstances, the following mode of obtaining an efficient supply of comparatively clear water is proposed.

1. To admit the Bay of Fundy water freely into the projected canal, after it has attained an elevation of eighty-five feet in Cumberland Basin.

2. To keep as great a volume of water as possible in reserve in the canal, in order to draw the supply therefrom during low neap tides, without permanently impairing the drainage of the marshes.

3. If this supply is found to be insufficient to construct dams across one or more of the rivers emptying into Cumberland Basin near their outlets, in order to convert them into reservoirs from which water can be drawn when required.

Reservoirs.

The rivers or portions thereof that may be used as reservoirs of supply, in connection with the several lines examined, are the Tintamarre, Au Lac, Missiquash and La Planche.

In order to be in position to accelerate the flow of the supply to be derived from the reservoirs, towards Baie Verte, as much as their natural disposition on the isthmus will permit, and moreover to provide for the simultaneous distribution of the water over as large an extent of canal as practicable, it is of importance that the upper reach of the canal should be accessible from these reservoirs, and contiguous thereto at their extreme eastern end, and at several intermediate points, between it and the Bay of Fundy.

Bearing in mind that Fort Cumberland ridge is between the Rivers Au Lac and Missiquash, and Fort Lawrence ridge between the Missiquash and La Planche, it is evident that the only rivers suitable as reservoirs on each of the routes examined, are the Rivers Tintamarre and Au Lac for the Tintamarre and Au Lac lines, the River Missiquash for the Missiquash line, and the River La Planche for the La Planche and Sharp's Creek lines.

These streams have been accuratively surveyed and cross-sectioned at various points.

The following are their respective capacities for one foot in depth, at ordinary high water, or when the tide has reached an elevation of eighty-seven to eighty-eight feet above datum.

	Cub. Feet.
Large bend of the Tintamarre cut off by dams X and Y, the river diverted being into new channel Z, so as to allow the tide to ascend as usual to long and Gravelly Lakes, for the formation of new marsh land	8,500,000
River Au Lac, as far as tide water will reach at an elevation of eighty-eight feet	12,600,000
River Missiquash, from outlet to first intersection with Missiquash Canal line	4,700,000
River La Planche, from outlet to Aboideau on Post road	7,800,000
River Tidnish from bridge on post road, at east end of Province boundary, to Doyle's mill dam, during ordinary high water at Baie Verte, or when the tide has reached an elevation of about seventy-four feet	2,500,000

The Tidnish is merely intended to receive the waste water from the canal.

Proposed Canal.

Draught of water in the canal.

The draught of water, as recommended by the Canal Commissioners in their Report of the 24th February, 1871, is fifteen feet in the canal; they have omitted, however, to state whether this draught should be available during low water at each terminus.

Bay of Fundy terminus.

According to the soundings taken, the depth available at extreme low water for vessels ascending the Bay of Fundy to Cnmberland Basin, towards the Tintamarre and Au Lac is 16 feet at 31·20 above datum. Thence the channel leading to Sharp's Creek becomes very shallow and circuitous, and is obstructed by cross current shifting quicksands, mud deposits, boulders and ledges of rock ; it ceases to be navigable at low water except for small craft, part of the way.

The only terminus therefore for a canal accessible at low water to vessels of fifteen feet draught, is near the mouth of the River Au Lac.

The terminus for a canal accessible to vessels of the same draught at about half tide, or when the surface of the water in Cumberland Basin has attained an elevation of sixty-six feet, above datum, can be located between Au Lac Point and Sharp's Creek ; the best entrance in such case would be between the outlet of the La Planche and Sharp's Creek.

Bay Verte terminus.

In Baie Verte the tide recedes from one half to three-fourths mile from the west shore sea-wards, at extreme low water, which is at an elevation of 65·57 above datum.

Any channel below this level must be obtained by dredging, and the sides of the cut must be protected by crib-work from the shore eastward. In order to obtain such a channel with a navigable depth of fifteen feet at extreme low water, at the shortest distance from the western shore, the eastern terminus of the canal should be located near Tidnish Head, whence the distance is 9,200 feet to sixteen feet depth of water.

At the eastern terminus of Lac line *viâ* Baie Verte Village, near Dank's Point, the length of artificial channel to be dredged to the same depth, and to be protected by crib-work, would be 19,000 feet.

Line recommended for canal.

The most favorable route with respect to access at low water, elevation of the ground, water supply and drainage of adjoining lands, is the Au Lac line, *viâ* Tidnish.

Level for canal and reservoir &c.

The levels best adapted for insuring an uninterrupted and sufficient supply of clear water are as follows, viz :—

	Above Datum.
Water surface, upper reach of canal and reservoirs,—minimum elevation	85·00
Water surface of tide water retained in upper reach of canal and reservoirs, maximum elevation	88·00
Canal bottom, upper reach	69·00
Top of embankment and towing path two feet higher than highest known tides, minimum elevation	102·00
Top of dykes along river Au Lac from which the tide is now shut out by the Etter Aboideau	98·00

If this river is converted into a reservoir, the aboideau will have to be removed for the passage of the water, and a bridge constructed for the post road and railway across the same ; new dykes will also have to be constructed in the place of the old ones, which are now in a dilapidated condition, for a total length of 19,000 lineal yards by about eight feet in height.

The total number of locks required is four at the western and two at the eastern terminus ; their respective elevations and lifts from one level to the other, are as follows :—

At Cumberland Basin :—	Elevation above Datum.	Lift.—Feet.
1st lift from extreme low water in lock	No. 1 at 47·20	15·13
To water surface in lock	No. 2 at 62·33	
2nd lift from water surface of lock	No. 2 at 62·33	12·33
To surface of lock	No. 3 at 74·66	
3rd lift from water surface of lock	No. 3 at 74·66	13·33
To water surface of lock No. 4 when this surface is at	88·00	
		40·80

Lock No. 4 has been added in order to exclude the tide from the upper reach of the canal, after it has reached a greater elevation than eighty-eight, in case it should be found necessary to do so.

	Elevation above Datum.	Lift Feet.
At Baie Verte :—		
1st lift from extreme low water in lock ..... No. 6	at 55·57	12·00
At eastern entrance to water surface of tide lock, No. 5	at 77·57	
2nd lift from surface of water in lock ..... No. 5	at 77·57	10·43
To surface of water in upper reach of canal	at 88·00	
		22·43

As the increase of trade might prove hereafter to be such as to require a depth of nineteen instead of sixteen feet in the canal for vessels of a greater draught, it is desirable to sink Locks Nos. 4 and 5 three feet lower at each end of the upper reach than what is actually required for a draught of fifteen feet over the sills. In such case, however, at extreme low water spring tides, vessels drawing over fifteen feet can neither enter the canal nor leave it before the tide has risen at least three feet, or to an elevation of 50·20 above the datum line.

It may be proper to observe that the word draught, in all cases, means the depth of water over the tops of the lock sills, and that the sills are placed one foot above canal bottom.

At the western terminus there is a basin of 600 by 300 feet above each of the first three locks ; at the eastern terminus there is the same number of basins, one above lock No. 5, one between Locks Nos. 5 and 6, and one below Lock No. 6.

Basins. These basins will give increased accommodation to vessels in their passage from one lock to another ; they will also serve to economize the greater portion of the water that would otherwise be lost, in case of successive lockages in opposite directions through the same flight of locks.

At the western terminus on Lac Point, the artificial channel to be excavated is some 2,000 feet in length and 300 feet in width between the piers required for its protection from the shore westward ; thence some dredging will be required for a distance of 2,500 feet further in the same direction.

From Lock No. 4 to Lock No. 5 above Tidnish bridge, the bottom of the canal prism on the upper reach is 100 feet wide, at the elevation of 69 feet, and the side slopes are two horizontal to one vertical ; the depth of water is three feet more than what is required for navigation in order to ensure a full supply towards the Baie Verte end of the canal and to provide against the emergency of the water being drawn off by repeated lockages faster than it can be supplied during a long succession of neap tides ; this surplus quantity will also be required in case the supply from the reservoirs should have to be stopped for the purpose of cleaning out or repairing the same.

From the basin below Lock No. 6 at Tidnish Bridge, the canal prism as far as Tidnish Head, is of the same dimensions as on the upper reach ; thence to sixteen feet water in Baie Verte, at extreme low water, the channel to be dredged from the shore, seaward, is 9,200 feet in length and 300 feet in width between the piers necessary for its production.

Efflux and Supply of Water.

The probable average maximum lifts on which the volume of efflux depends, are effected by the tidal fluctuations at each end of the projected canal ; they may be set down at thirteen feet in the Bay of Fundy, and at eight feet in Baie Verte.

If sixty lockages per day of twenty-four hours, through the canal, are taken as the basis of calculation, the average volume of water discharged daily into Cumberland Basin, after deducting 20,000 cubic feet for the space occupied by a vessel in any of the locks,

	Cubic Feet.
would be	7,100,000
and the volume discharged into Baie Verte would amount to	3,984,000
The whole would thus be equivalent to a daily discharge of	11,084,000
or to a semi-diurnal discharge of	5,542,000
The quantity likely to be discharged or wasted in addition thereto, for scouring purposes, leakage, evaporation and absorption, is	858,000
The total semi-diurnal discharge, will therefore probably amount to	6,400,000

As tide water supplies are intermittent and variable according to the phases of the moon, it is evident that in order to be constantly in a position to meet the daily consumption of 12,800,000 cubic feet, the total volume of water kept in reserve and available at elevations varying from 85 feet upwards above datum, must necessarily be large enough to allow of keeping up the supply the whole of the time during which the semi-diurnal tidal influxes fail to make up the corresponding losses sustained.

Although such a deficiency in the supply might occur for as many as ten consecutive days, during an unfavorable succession of tides similar to that observed in August, 1870, when the water rose scarcely to an elevation of 88 feet, or to the height proposed for the summit level of the upper reach of the projected canal (see tidal fluctuations, page 37)—it may be safely assumed that the volume of water that would have to be drawn from the surplus kept in reserve between the elevations of 85 and 88, would never exceed the total quantity necessary to work the canal during 6 days, viz :—76,800,000 cubic feet; this quantity is considered sufficient to supply the total deficiency during a range of tides such as that referred to.

Out of the total volume required, 44,000,000 cubic feet are admitted directly into the canal; the remaining 32,800,000 cubic feet, and a surplus quantity of 5,000,000 are held in reserve in the River Au Lac between the same elevations of 85 and 88, by means of a dam constructed across it towards its outlet; the water from this reservoir must be furnished to the canal by means of supply weirs and raceways, as indicated on the plan at the points marked A. B. C. D. E.

If a greater quantity of water is required any time, on account of the deepening of the canal, for the passage of vessels of eighteen feet draught, instead of fifteen, or for other purposes, the portion of the River Tintamarre before referred to, may be converted into a reservoir, thus adding 25,000,000 cubic feet to the volume of water in reserve.

The main feeder at the western entrance of the canal, as shown on the plan, is about 5,000 feet in length, and varies in width from 500 feet at the shore end, to 250 feet at its junction with the canal; its elevation at bottom is 84 feet above datum, and its water surface corresponds with that of the tide above this elevation.

The bottom elevation of the supply weirs and raceways should be the same as that of the main feeder, the water surface being the same as that of the reservoirs.

The dam at the mouth of the Au Lac should be constructed with sluice gates for the purpose of emptying the reservoirs when necessary at low tide, and for draining the canal; it should also be built so as to maintain the water at the required height in the reservoirs, and so as to shut out the tide if found necessary.

Two of the supply weirs should be sunk to a depth of one foot below the bottom level of the canal or to an elevation of sixty-eight above datum at B and D, so as to drain off the water into the River Au Lac, and two waste weirs should be constructed at the points H and I, so as to drain the canal, or let off the surplus water into the River Tidnish, independent of the three waste weirs shown at the points F, G and J, for the efflux of the surface water.

Excavation.

In calculating the quantity of excavations to be done for the construction of the canal, provision has been made for the removal of the muck and soft material from the side slops of the canal prism, and from the seat of all embankments across the bogs, swamps or other wet lands.

On the south side of the canal, where it is proposed to place the towing path, if the elevation of the ground is greater than 102 feet above datum, it is reduced to the level for a breadth of 20 feet, including 5 feet for a side ditch, or to a lower level if necessary on account of mucking. On the north side, the breadth calculated to be removed to prevent the sliding of muck, land, or of any soft material into the canal, is 10 feet.

The towing path embankment is supposed to be 10 feet wide at the top, with side slopes of two horizontal to one vertical.

The calculation of the dredging at the termini includes the removal of all material for a breadth and depth sufficient to sink the piers to the same level as the bed of the channel.

At the eastern end of the canal, the lower locks Nos. 5 and 6 are shown on the upper side of Tidhish bridge, with dams on either side across the river, for which a new channel with a regulating weir is supposed to be constructed for the passage of the water through the lower reach of the canal into Baie Verte.

This location appears to be advisable—

1st. In order to avoid the construction of a tunnel for the escape of the river water under the canal, because it would be liable to fill up with sand and saw dust or other refuse matter from the stream and mills thereon above.

2nd. If a dam is built across the Tidnish without any outlet for the water, the mills would become useless, and extensive area of low land would be permanently flooded, and the drainage of lands along the river would be much impaired.

3rd. The soil between Tidnish bridge and Tidnish Head, for a distance of $1\frac{1}{2}$ miles, according to the borings made, is of a sandy nature and does not appear to be suitable for lock foundations.

4th. Even if a good foundation can be found, on further examination, by the sinking of test pits, the waters of the Tidnish would be permanently raised to the same height as the summit level of the canal and the low lands inundation for several miles upwards, or a tunnel for the escape of the water would have to be built, if the locks were placed near Tidnish Head.

The location of the locks near Tidnish bridge, will however involve the necessity of excavating an extra depth of $1\frac{1}{2}$ miles, or an additional quantity of 443,500 cubic yards.

As ditches for the drainage of the lands on the north and south sides of the canal must be dug, the quantity to excavate for this purpose has been included with the other excavation.

The probable quantity of excavation to be done on each of the lines examined for the projected canal, the length of each line, and that of the piers required at the various termini are shown on the comparative statement appended hereto at pages 21 & 22.

Land Required.

The extent of land that would probably be required for the canal and outside drainage is about 500 feet in width for a distance of 1,884 miles, equal say to 1,146 acres.

Its cost, according to an estimate made by A. Monro, Esq., P.L.S,, who acted as one of my assistants during the survey, will probable amount to $68,000, including water damages.

Fencing Required.

The total length of fencing required on both sides of the canal from the shore to shore, will be about 199,000 feet.

Number of Bridges Required.

One permanent bridge of probably 700 feet in length will be required across the River Au-Lac for the Intercolonial Railway and Post road, and 9 swing bridges across the other roads traversed by the canal.

Extent of Bog and Bush Land.

The line passes over 27,000,000 feet in length of bog land, and 24,000,000 feet of bush land.

In concluding this Report on the Baie Verte Canal Survey, I beg to acknowledge the valuable assistance rendered during the survey by Messrs T. Guerin, A. Monro and R. Steckel.

Should any further information be required during my absence from Ottawa this spring and next summer, I beg to refer you to Mr. Steckel, who has assisted me constantly on the field, and has prepared the general map and principal profiles of the entire work.

I have the honor to be, Sir,
Your most obedient servant,

(Signed,) G. F. BAILLAIRGE,
Assistant Chief Engineer, Public Works.

John Page, Esquire,
Chief Engineer,
Department Public Works.

COMPARISON of the various lines described, with respect to Length, Quantity of Excavation and the Piers at the Termini.

Names of Lines.	Length of each line. — Miles.	Quantity of Excavation to be done.				Total excavation. — Cub. yds.	Length of Piers at Termini. — Feet.	Total length of Piers at Termini. — Feet.
		Dredging. — Cub. yds.	Mucking. — Cub. yds.	Earth. — Cub. yds.	Rock. — Cub. yds.			
Sharp's Creek line, accessible only at half-tide, at the Bay of Fundy Terminus, for vessels of 15-ft. draught	.....	.....	.....	.....	.....	.....	West.	.....
Shore to shore	18·07	.....	.....	.....	.....	.....	6,000·00	.....
Do do ordinary low water, Bay of Fundy	0·60	.....	.....	.....	.....	.....	East.	.....
Do do 16-ft. at extreme low water, Baie Verte	1·74	.....	.....	.....	.....	.....	18,400·00	.....
	20·41	1,572,222·12	308,967·51	16,156,463·87	3,686,529·02	21,724,182·52	24,400·00	24,400·00
La Planche line, accessible only at half-tide, at the Bay of Fundy Terminus, for vessels of 15-ft. draught	.....	.....	.....	.....	.....	.....	West.	.....
Shore to shore	17·19	.....	.....	.....	.....	.....	7,200·00	.....
Do do ordinary low water, Bay of Fundy	0·70	.....	.....	.....	.....	.....	East.	.....
Do do 16-ft. at extreme low water, Baie Verte.	1·74	.....	.....	.....	.....	.....	18,400·00	.....
	19·63	1,811,657·31	342,963·80	15,542,697·02	3,686,529·02	21,383,847·15	25,600·00	25,600·00
Missiquash line, accessible at extreme low water in Bay of Fundy and Baie Verte, for vessels of 15-ft draught	.....	.....	.....	.....	.....	.....	West.	.....
Shore to shore	18·86	.....	.....	.....	.....	.....	4,000·00	.....
Do do 16-ft at extreme low water, Bay of Fundy	0·70	.....	.....	.....	.....	.....	East.	.....
Do do ,, ,, ,, Baie Verte	1·74	.....	.....	.....	.....	.....	18,400·00	.....
	21·45	2,255,677·73	493,198·14	18,684,358·89	1,207,508·47	22,640,743·23	22,400·00	22,40 0·00
Au Lac line viâ Tidnish, accessible at extreme low water in Baie of Fundy and Baie Verte, for vessels of 15-ft. draught	.....	.....	.....	.....	.....	.....	West.	.....
Shore to shore	18·84	.....	.....	.....	.....	.....	4,000·00	.....
Do do 16-ft at extreme low water, Bay of Fundy	0·85	.....	.....	.....	.....	.....	East.	.....
Do do ,, ,, ,, Baie Verte	1·74	.....	.....	.....	.....	.....	18,400·00	.....
	21·43	2,255,677·73	357,505·90	16,972,395·29	2,472,054·22	22,057,633·14	22,400·00	22,400·00

COMPARISON of the various lines described, with respect to Length, Quantity of Excavation and the Piers at the Termini.—*Continued.*

Names of Lines.	Length of line. — Miles.	Quantity of Excavation to be done. Dredging. — Cub. yds.	Mucking. — Cub. yds.	Earth. — Cub. yds.	Rock. — Cub. yds.	Total excavation. — Cub. yds.	Length of Piers at Termini. — Feet.	Total length of Piers at Termini. — Feet.
Au Lac line viâ Baie Verte Village, accessible at extreme low water in Bay of Fundy and Baie Verte for vessels of 15-ft. draught								
Shore to shore	17·04						West.	
Do do 16-ft at extreme low water, Bay of Fundy	0·85						4,000·00	
Do do ,, ,, ,, Baie-Verte	3·60						East.	
							38,000·00	
	21·49	3,787,785·15	698,927·79	12,812,249·26	4,878,815·81	22,177,778·11	42,000·00	42,000·00
Tintamarre line viâ Tidnish, accessible at extreme low water in Bay of Fundy and Baie Verte for vessels of 15-ft. draught								
Shore to shore	18·46						West.	
Do do 16-ft at extreme low water, Bay of Fundy	1·36						500·00	
Do do ,, ,, ,, Baie Verte	1·74						East.	
							18,400·00	
	21·56	2,250,000·00	357,505·90	16,760,662·01	2,472,054·22	21,840,222·13	18,900·00	18,900·00

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 22nd May, 1872;—For copies of all correspondence, Orders in Council, reports, estimates, plans, specifications and other papers relating to the deepening of Shippegan Gully.

By Command.

J. C. AIKINS,

Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,

OTTAWA, 5th June 1872.

[In accordance with the recommendation of the Joint Committee on Printing, the above Return is not printed.]

RETURN

In reference to the expenses of transport of Emigrants over the Red River Route, during the summer of 1871.

[*In obedience to the Order of the House of Commons of 22nd April*, 1872.]

OTTAWA, 21st May, 1872.

Memorandum.

Annexed is a statement shewing the number of emigrants conveyed over the Red River Route, between Lake Superior and Fort Garry, during the summer of 1871.

No teams or men were maintained at Prince Arthur's Landing last year, exclusively for the conveyance of emigrants. The number of teams on the Thunder Bay road varied from 15 to 30 and they had to be kept up for the carriage of stores to the works in progress, and the transport of troops as well as for the use of emigrants. The average cost of each team with driver, including passage from Collingwood and all expenses, was $4.00 per day.

On the navigable sections, between the westerly terminus of the Thunder Bay road and the north-west angle of the Lake of the Woods (310 miles) a number of boats and steam-launches were maintained for the conveyance of emigrants, stores for the works and the transport of troops, but there was no separate organization for emigrants. When they made their appearence they were taken forward by the men on the works.

In regard to the Lake of the Woods road, that is, the road extending from the north-west angle to Fort Garry, the mode of conveyance was by carts drawn by horses or oxen. The hire of a man with two such carts averaged 8 shillings sterling per day. The man was supplied with rations, but he had to find his own cattle in provender. If the carts had to be kept waiting at the north-west angle, which was frequently the case when emigrants were expected, they were then allowed only 5 shilings sterling per day, that is, for a man with two carts and two horses or oxen.

Last year, the number of emigrants being small, no fair criterion was afforded of what the cost per head would be for greater numbers; but in the present state of the route if as many as one thousand emigrants should offer, they could be taken through at $25.00 per head; two thousand would cost, about $15.00 per head, and four thousand might be taken at $10.00 per head that is, from Prince Arther's Landing to Fort Garry.

When the spring opened last year, the route with the exception of the Thunder Bay and Fort Garry roads, was in a very primitive condition; during the past summer the portages were opened and dams built to improve the navigation. By the 1st of August of the present year, there will be 9 steam launches and two large steamers on the navigable sections. Barges are being provided for the conveyance of horses and heavy articles and waggons and teams have been purchased for the Fort Garry road.

When the means of transport now being prepared are in operation, farmers will be able to take their horses and heavy implements over the route without difficuty or any great delay. During the past winter, comfortable buildings were put up for the accommodation of emigrants at Shebandowan, Kashabonne, Height of Land, and Fort Francis. Material is in readiness for sheds and houses which will shortly be put up at the North-West Angle, and between that point and Fort Garry there are houses and sheds at convenient intervals.

Respectfully submitted,
(Signed,) S. J. DAWSON.

F. Braun, Esq., Secretary.
Department of Public Works, Ottawa.

RED RIVER ROUTE.—

RETURN shewing number of Emigrants passed over the route from

No. of Persons.	Date.	Name.	Country.	Last place of Residence.	Religious Denomination.
	1871				
1	June 21	George McCrea	Canada	Co. Bruce	Presbyterian
2	"	Joseph Glann	"	Co. Grey	"
3	June 22	Alfred Andrews	England	Bradfort	Church of England
4	"	P. A. Robertson	Canada	Co. Northfold	Presbyterian
5	"	E. Armstrong	Ireland	"	Church of England
6	"	M. McFaden	Canada	Stratfort	"
7	"	Geo. McPhillips	Ireland	Seaforth	Roman Catholic
8	"	Dan Forbes	Nova Scotia	Co. Bruce	Presbyterian
9	"	D. H. Coulter	Canada	Co. Perth	Methodist
10	"	S. G. Dorand	"	"	Quaker
11	"	Geo. Edwards	"	"	Methodist
12	"	Andrew Laing	"	Owen Sound	Presbyterian
13	"	Henry. Marshall	"	"	"
14	"	G. McLaughlan	Scotland	Co. Welland	"
15	"	Ben. Jones	Canada	Owen Sound	Methodist
16	"	Barbara Jones	"	"	Presbyterian
17	"	Margaret Wilson	Scotland	"	"
18	"	Christiana McKay	"	"	"
19	"	B. J. Jerolamy	Canada	"	"
20	"	Adam Beathy	"	Co. Leeds	"
21	"	J. Smith	England	"	Church of England
22	"	D. Baxter	Ireland	Muskoka	Presbyterian
23	"	John Kickwood	Canada	Toronto	"
24	"	Walter Denand	"	Co. Leeds	Church of England
25	"	Anderson	England	Toronto	"
26	"	John Dailing	Canada	Co. Leeds	Presbyterian
27	"	Wm. C. Calklin	Nova Scotia	Halifax	Methodist
28	"	John W. Geddie	"	"	Presbyterian
29	"	Philip Thomas	England	Co. Perth	Church of England
30	"	Elizabeth Thomas	"	"	"
31	"	Wm. Thomas	Canada	"	"
32	"	Geo. Thomas	"	"	"
33	"	Isabella Thomas	"	"	"
34	"	Priscilla Thomas	"	"	"
35	"	Philip Thomas	"	"	"
36	"	Richard Thomas	"	"	"
37	"	Emma Thomas	"	"	"
38	"	Margaret Thomas	"	"	"
39	"	Frank McPhillips	"	Windsor	Roman Catholic Church
40	"	Magnus Begg	"	Ottawa	Presbyterian
41	"	John D. Parr	England	Stratfort	Church of England
42	"	Wm. Crawfort	Ireland	"	"
43	"	Charles Smith	England	Montreal	"
44	"	Wm. Gooderidge	"	Co. Northumberland	"
45	"	W. A. Piers	"	Halifax	"
46	"	Chas. Goodridge	"	Co. Northumberland	"
47	"	D. H. McKenzie	Nova Scotia	Nova Scotia	Presbyterian
48	"	John McKenzie	"	"	"
49	"	W. Acheson	England	Isle Man	Church of England
50	"	Sydney S. Scouten	Canada	Co. Frontenac	Methodist
51	"	A. C. Kemp	England	Middlesex	"
52	"	N. Hutchison	"	Devon	Deist
53	"	John Matheson	Canada	Welland	Methodist
54	"	George King	England	York	Church of England
55	"	Robert Greisly	"	Northfold	"
56	"	Wm. Lanigan	Ireland	Cavan	"
57	"	Wm. McDonald	"	"	"
58	"	Wm. Sawnders	Germany	Rhine Pro	Roman Catholic Church
59	June 7	Richard Pelly	England		Episcopalian

NORTH-WEST TERRITORIES.

Fort William to Fort Garry, for the year ended 31st December, 1871.

Age.	Single.	Married.	Children.	Trade or Occupation.	No. of Tickets.	Issue of Tickets.	Remarks.
30	S	....	....	Farmer.....	1	At. Govt. Depot T. Bay.	Paid Cash..... .....$25 00
32	S	....	....	"	1	"	" 25 00
21	S	....	....	"	1	"	" 25 00
23	S	....	....	"	1	"	" 25 00
45	S	....	....	Shoemaker	1	"	" 25 00
42	....	M	....	Surveyor	1	"	On Colonel Dennis' order—Manitoba, 30 lbs. ex-baggage, pd. 40 c. ; Surveys.
59	....	M	....	"	1	"	On Colonel Dennis' order.
21	S	....	....	Farmer.....	1	Per Steamer Chicora....	
24	S	....	....	"	1	" ...	
54	....	M	....	Joiner.....	1	"	
22	S	....	....	Farmer.....	1	"	
24	S	....	....	Carpenter	1	"	23 lbs. ex-baggage, pd. 35 c. at Depot, T. Bay.
21	....	M	....	"	1	"	260 lbs. ex-baggage, pd. $3.90
28	S	....	....	"	1	"	at Depot, T. Bay.
48	....	M	....	Clergyman			
36	....	M	....	.....			
18	S	....	....	....	4½	"	2850 lbs ex-baggage, pd. $42.25
27	S	....	....	.....			at Depot, T. Bay.
11	S	....	....	.....			
27	S	....	....	Surveyor's Asst.....	1	Per Northern R. Co. Tor.	
27	S	....	....	Draftsman.....	1	"	
26	S	....	....	Farmer..	1	"	
18	S	....	....	Gentleman	1	"	
21	S	....	....	Miller.....	1	"	
21	S	....	....	Gentleman	1	"	
20	S	....	....	Merchant	1	"	
22	S	....	....	Chemist and Druggist...	1	"	50 lbs. ex-baggage, pd. 75 c.
19	S	....	..	Clerk.....	1	"	
40	....	M	....	Farmer.....			
36	....	M	....	.....			
14	....	....	....	.....			
11	....	....	....	.....			
9	....	....	8	.....	5	"	160 lbs. ex-baggage, pd. $2.40
7	....	....	....	.....			
5	....	...	..	....			
4	....	....	....	.....			
2	...	....	....	.....			
1	...	....	....	.....			
24	S	....	....	Surveyor	1	"	
21	S	....	....	" Asst	1	"	
21	S	....	....	" "	1	"	
21	S	....	..	" "	1	"	
20	S	....	....	Draftsman	1	"	303 lbs. ex-baggage, pd. $4.54
22	S	....	....	Farmer.....	1	"	
19	S	....	....	Clerk	1	"	25 lbs. ex-baggage, pd. 37 c.
20	S	....	....	Farmer.....	1	"	
36	S	....	....	Surveyor	1	"	
27	S	...	....	"	1	"	
23	S	....	....	Baker	1	"	Ch. to Dept. Militia & Defence
23	S	....	....	Surveyor's Clerk.....	1	Gov. Depot T. Bay	" "
23	..	M	....	"	1	"	" "
21	S	....	....	Laborer	1	"	" "
27	S	....	....	Carpenter	1	"	" "
25	S	....	....	"	1	"	" "
26	S	....	....	Silk Spinner.....	1	"	" "
27	S	....	....	Laborer	1	"	" "
30	S	....	....	Baker.....	1	"	" "
31	S	....	....	Silk Spinner.....	1	"	
22	S	....	....	Surveyor	1	"	Charge Maintoba Survey.

RED RIVER

No. of Persons.	Date.	Name.	Country.	Last place of Residence.	Religious Denomination.
	1871				
60	June 7	Hamnet Pinhey	Canada		Roman Catholic
61	"	Peter King	"		Presbyterian
62	"	G. A. Doucette	"	Cacouna	Roman Catholic
63	"	J. A. Beaudry	"	Montreal	"
64	"	C. C. Smith	"	"	Episcopalian
65	"	A. Piché	"	"	Roman Catholic
66	June 8	And. White	Scotland	Halton	Presbyterian
67	"	Philip McKay	"	"	"
68	"	James Irvine	Canada	Glengarry	"
69	"	Wm. Mellon	England	York	Episcopalian
70	"	Sarah Mellon	"	"	
71	"	Philip Mellen	Canada	"	
72	"	Wm. Mellon	"	"	
73	"	Wm. McCarthy	"	Richmond	Presbyterian
74	"	Joseph Hall	"	Simcoe	"
75	"	Ed. Brook	"	Perth	"
76	"	Sarah Brook	"	"	"
77	"	John J. Brook	"	"	"
78	"	Ed. Brook	"	"	"
79	"	Letitia Brook	"	"	"
80	"	Mary A. H. Brook	"	"	"
81	"	F. J. Brook	"	"	"
82	"	W. H. Brook	"	"	"
83	"	Wm. Gorden	Nova Scotia	Bradfort	"
84	June 24	Fred. Measen	England	Ottawa	Episcopalian
85	"	David Ferneri	Canada	Madoc	"
86	"	Daniel Low	"	County Bruce	"
87	"	Sarah Low	Ireland	"	"
88	"	Jos. Low	Canada	"	"
89	"	Jas. Humphreys	England	Toronto	"
90	"	Geo. Berridge	"	"	"
91	"	W. Wagner	Germany	"	Lutheran
92	Aug. —	E. Brokoviski	"	"	"
93	"	F. Fener	"	"	"
94	"	R. Woods	"	"	Presbyterian
95	"	H. McRae	Canada	Glencoe	"
96	"	W. Nordheimer	"	Toronto	Episcopalian
97	"	W. Brabascon	"	"	"
98	"	W. Barbascon, Jr.	"	"	"
99	"	Moses Frost	Germany	Sand Point	
100	"	L. Frost	"	"	
101	Aug. 28	John Smith	Scotland	Owen Sound	Presbyterian
102	"	R. W. Rossiter	Canada	"	"
103	Sept. 6	Henry Daniels	England	Toronto	"
104	"	Timothy O'Brien	"	"	Roman Catholic
105	"	John Conway	"	"	Presbyterian
106	"	James McIlroy	Scotland	County Perth	"
107	"	Mrs. Mulvey	Ireland	County Haldimand	"
108	"	W. Mulvey	Canada	"	"
109	"	Barbara Mulvey	"	"	"
110	"	John Mulvey	"	"	"
111	"	Stewart Mulvey	"	"	"
112	"	Thos. Mulvey	"	"	"
113	Sept. 11	W. R. Dick	"	Fenelon, Co. Vict.	Baptist
114	"	Francis Willock	"	" "	Presbyterian
115	"	Thos. Ellis	"	" "	"
116	"	John Wrixon	Ireland	Peterboro'	Episcopalian
117	"	Ellen Wrixon	England	"	"
118	"	Hannah Wrixon	"	"	"
119	"	Chas. Wrixon	Ireland	"	"
120	"	Joseph Lodge	England	Toronto	"
121	Sept. 17	Geo. Wright	"	Charlotteville	"
122	"	John Provan	Scotland	"	Presbyterian
123	Sept. 19	Saml. Jas. Corbett	Canada	County Victoria	Episcopalian

ROUTE.—*Continued.*

Age.	Single.	Married.	Children.	Trade or Occupation.	No. of Tickets.	Issue of Tickets.	Remarks.
23	S	....	....	Asst. Surveyor	1	Per Northern R. Co.....	
24	S	....	....	Axeman.....	1	Gov. Depot T. Bay	Charge Manitoba Survey.
32	S	....	....	Surveyor	1	"	" "
28	....	M	....	"	1	"	" "
21	S	....	....	" Asst	1	Northern R. Co.....	
27	S	....	...	" "	1	Gov. Depot T. Bay	" "
24	S	....	....	Stone Cutter	1	Northern R. Co.....	
27	S	....	....	Quarry man	1	"	
24	S	....	....	Farmer	1	"	
33	....	M	....	"	1	"	
22	....	...	....	.....	1	"	
2	....	....	....	.....	½	"	
1	....	....	....	.....			
44	....	M	....	Storekeeper	1	"	
47	S	....	....	Farmer.....	1	Str. Chicora	
48	....	M	....	Carpenter	1	Northern R. Co.....	900 lbs. ex-baggage, pd. $13.50
35	....	....	....	.....	1	"	
11	....	....	....	.....	1	"	
9	....	....	....	.....			
6	....	....	....	.....	1	"	
6	....	...	....	.....			
3	....	....	....	.....	½	"	
1	....	....	....	.....			
38	S	....	....	School Master	1	"	543 lbs. ex-baggage, pd. $8.14
16	S	....	...	None	1	"	
21	S	....	....	Surveyor	1	Gov. Depot T. Bay	
40	....	M	....	Farmer.....	1	Chicora	926 lbs. ex-baggage, pd. $13.89
36	...	M	....	.....	1	"	
19	....	....	....	....	1	"	
28	....	M	....	Clerk	1	Northern R. Co.....	
24	S	....	....	Sailor	1	"	490 lbs. ex-baggage, pd. $7.35
53	....	M	....	Surveyor	1	"	
28	S	....	....	"	1	"	
45	S	....	....	Asst. Surveyor	1	"	
32	S	....	....	"	1	"	
30	S	....	....	"	1	"	
21	S	....	....	Gentleman	1	"	
50	....	M	....	Surveyor	1	"	
19	S	....	....	Asst. Surveyor	1	"	
39	....	M	....	Lumberman	1	Thunder Bay	..... Paid $25
28	S	....	....	"	1	"	..... " 25
32	....	M	....	Carpenter	1	"	1180 lbs. ex-bag- " 25
33	....	M	....	"	1	"	gage, pd. $17.71. " 25
16	S	....	....	Asst. Butcher	1	Northern R. Co.....	
16	S	....	....	Currier.....	1	"	
16	S	....	....	No Trade	1	"	
52	....	M	....	Carpenter	1	Str. Algoma	
34	....	M	....	.....	1	"	
12	S	....	....	.....	1	"	
10	S	....	....	.....			
8	S	....	....	.....	1	"	
6	S	....	....	....			
3	S	....	....	....			
50	....	M	....	Farmer	1	Thunder Bay	.... Paid $25
36	....	M	....	"	1	"	..... " 25
20	S	....	....	"	1	"	..... " 25
39	....	M	....	"	1	Northern R. Co.....	80 lbs. ex-baggage, pd. $1.20
28	....	M	....	"	1	"	
24	....	M	....	....	1	"	
2	S	....	....	.....	½	"	
25	....	M	....	Machinist	1	"	110 lbs. ex-baggage, pd. $1.65
52	....	M	....	Butcher	1	"	
24	....	M	....	Mechanic	1	"	
27	....	M	....	Farmer	1	St. Chicora	225 lbs. ex-baggage, pd. $3.37½

RED RIVER

No. of Persons.	Date.	Name.	Country.	Last place of Residence.	Religious Denomination.
	1871				
124	Sept. 17	Samuel Corbett	Canada.....	Co. Victoria	Episcopalian..... .....
125	Sept. 11	John Ham	England.....	"	Methodist .....
126	"	Rebecca Corbet.....	Canada.....	"	Episcopalian .....
127	"	Margaret Corbet...	Ireland.....	"	" ....
128	"	Mary Mathilda Corbet..	Canada.....	"	" .....
129	"	Margt. Angeline Corbet.	"	"	" .....
130	"	Laura Ann Corbett	"	"	" .....
131	"	R. S. Corbet.....	"	"	" .....
132	"	Wm. H. Corbet	"	"	" .....
133	"	John Spratt	"	Co. Russell	Methodist..... .....
134	"	Elizabeth Spratt.....	"	"	" .....
135	"	John McLean	Scotland.....	Co. Peterboro'	Presbyterian.....
136	"	Alfred Dalton	England.....	Montreal	Episcopalian .....

OTTAWA, 31st December, 1871.

ROUTE.—*Continued.*

Age.	Single.	Married.	Children.	Trade or Occupation.	No. of Tickets.	Issue of Tickets.	Remarks.
26	S	....	....	Farmer.....	1	Str. Chicora.....	225 lbs. ex-baggage, pd. $3.37½
22	S	....	....	"	1	"	
20	....	M	....	.....	1	"	
50	....	M	....	.....	1	"	
18	S	....	...	School Teacher	1	"	
14	S	....	....	.....	1	"	
11	S	....	....	.....	}	"	
8	S	....	....	.....	}1	"	
12m	S	....	....	.....	}	"	
38	....	M	....	Farmer	1	Northern R. Co.....	
37	....	M	....	.....	1	"	
66	....	M	....	"	1	Gov. Depot T. Bay	..... Paid $25
33	S	....	....	"	1	"	..... " 25
				Add.....	3½	Per Northern Railway ..	Names not taken.
					123½	Tickets.	

Certified correct.

(Signed,) D. A. GRANT,
Acct. and Pay Master.

RED RIVER ROUTE.—NORTH-WEST TERRITORIES.

RETURN shewing number of Passengers forwarded over the Route from Fort Garry and intermediate Stations to Thunder Bay, Lake Superior, to 31st December, 1871.

No.	Date.	Name.	From.	To.	Amount received from Passengers.	REMARKS.
	1871				$ cts.	
1	Sept. 11....	W. Paden	Fort Garry	Thunder Bay	10 00	These men worked their way over part the route, from Fort Garry to Thunder Bay, and were allowed an abatement.
2	"	D. McKenzie.....	do	do	10 00	
3	"	Andrew White	do	do	5 00	
4	Sept. 25....	W. E. Jones.....	do	do	25 00	
5	Sept. 30....	W. H. Head	N. W. Angle	do	15 00	
6	"	James Lillies	do	do	15 00	
7	"	Henry Gerttridge.....	do	do	15 00	
8	"	W. Allan.....	do	do	15 00	
9	"	H. M. Allan	do	do	15 00	
10	Oct. 6.....	R. J. Wettenhall	Fort Francis.....	do	12 50	
11	"	Robert Dillworth	do	do	7 50	
12	"	John Kelly.....	do	do	12 50	
13	"	Thos. Savage	do	do	12 50	
14	"	J. Collins	do	do	12 50	
15	"	R. Boulton	do	do	12 50	
16	"	M. O'Rourke	do	do	12 50	
17	"	J. Pickfort	do	do	12 50	
17	"	.....	do	do	12 50	
12	July 10.....	Officers 2nd Batt. Quebec Rifles....	Fort Garry	do	25 each	Charge to Dept. Militia and Defence.
103	"	Non-com. Officers do				
17	"	Officers 1st Batt. Ontario Rifles ...	do	do	25 "	do do
83	"	Non-com. Offrs. and Men do ...				
12	July 15.....	Disbanded Soldiers	do	do	25 "	do do
244						

Certified correct.

(Signed,) D. A. GRANT,
Acct. and Pay Master.

OTTAWA, 31st December, 1871.

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 1st May, 1871; For Copies of all correspondence relative to Fees charged by American Officials on Goods and Produce passing through the United States in bond.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE.
OTTAWA, 10th May, 1872.

CONSULATE GENERAL OF THE UNITED STATES FOR THE BRITISH NORTH AMERICAN PROVINCES.

MONTREAL, February 25th, 1858.

SIR,—In order to prevent detention at the frontier ports, you are directed to notify shippers of the following regulations of the Treasury Department of the United States :—

Invoices are required to be certified by Consular Officers in the following cases :—

1st.—On dutiable goods, where the owner does not reside in the United States.—*Treasury Regulations of* 1857, *Articles* 203, 204, 206, 207, 209, 281, 287, 706 & 707.

2nd.—Where the manufacturer is part owner, notwithstanding another part owner resides in the United States, the invoice of the goods must be accompanied by a Consular Certificate.—*Treasury Regulations of* 1857, *Art.* 710.

3rd.—Articles of the produce of the United States exported to the British North American Provinces, and brought back in the same condition as when exported, claiming to be entered free of duty, must be accompanied by a certificate of the Collector of the former port from which the re-importation is made, of the identity of the goods, and of their unchanged condition, which certificate must be authenticated by a Consular Officer.—*Treasury Regulations of* 1857, *Articles* 242, 246, 286, 293, 930 & 936.

4th.—Merchandise of the value of one hundred dollars and upwards claiming exemption from duty under the Reciprocity Act, the affidavit of the owner to the invoice, stating the place of the growth or production of the goods, and their value, verified by a certificate of a Consular Officer, is required.

If there be no Consular Officer at the place of export, the oath to the certificate may be taken before a local magistrate, and the Consular Officer most convenient to the shipper is authorized to authenticate the same.—*Treasury Regulations of* 1857, *Articles* 922, 923 & 924, *and Treasury Circular of February* 12, 1858, *published herewith.*

Consular Officers are also authorized to certify invoices without the oath of the owner, if they believe the place of production and value are correctly stated therein.—*Treasury Circular of February* 12, 1858.

Goods and merchandise passing from the United States into Canada free under the Reciprocity Act, and there undergoing any change by process of mauufacture, cannot be re-imported into the United States free, but are dutiable.

In all such cases Consular Agents will certify the fact for the decision of the Collectors.—*Treasury Regulations of* 1857, *Art.* 930.

The forms prescribed by the Department; published herewith for the information of Consular Officers; also a Circular of the Secretary of the Treasury, modifying the provisions of Article 922. Sec. 3rd, Cap. 10, of the Regulations under the Revenue Laws for 1867, and enforcing the same as modified.

WYMAN B. S. MOOR,
U. S. Consul General for
B. N. A. Provinces.

To————————

Consular Agent.

CIRCULAR INSTRUCTIONS TO COLLECTORS AND OTHER OFFICERS OF THE CUSTOMS.

TREASURY DEPARTMENT, February 12, 1858.

Collectors and other officers of the Customs of the frontier ports are instructed, that on all importations from the North American British Provinces claiming exemption from duty under the stipulations of the Reciprocity Treaty, the proof prescribed in Section 3, Article 922, of the growth or production of the merchandise, is required in all cases where the actual value of the merchandise shall exceed the value of one hundred dollars, and where there in no Consular officer at or near the port of exportation, the oath prescribed in forms Nos. 278 and 279 may be taken before a local magistrate, duly authorized by the laws of the country to administer oaths, which oath, so taken, shall be accompanied by a Consular certificate in the following form :—

I certify that————————, the person signing the above certificate as a magistrate, is duly authorized to administer oaths by the laws of this Province, and that I believe the statement contained in the above certificate to be true.

(Date) ————————,

U. S. Consul.

The oaths prescribed in forms Nos. 280 and 281 are dispensed with.

In cases of parcels or packages of merchandise of a value not exceeding one hundred dollars, the same may be admitted to entry without the aforesaid proof, provided the collector is satisfied that they are the growth or produce of the said Provinces.

A Consular certificate of the origin of the merchandise, in the form following, may also be received by collectors as sufficient evidence of origin to entitle merchandise to entry under the Reciprocity Act :—

I certify that the goods or merchandise described in this invoice are of the growth or produce of the Province of————————, and of the value within stated.

————————,

U. S. Consul.

HOWELL COBB,
Secretary of the Treasury.

No.

I, A. B. do solemnly and truly swear, that the goods, wares, or merchandise described in the invoice now produced and hereunto annexed, were actually purchased for my account, or for account of myself and partners in the said purchase; and that said invoice contain a true and faithful account of the actual cost thereof, and of all charges thereon; and that no discounts, bounties, or drawbacks are contained in the said invoice but such as have been actually allowed on the same; and that said goods are the growth or product of the Province of———

(Signed,) A. B.

Sworn to and subscribed before me, at———, the —— day of ———, A. D. 18— and of the independence of the United States of America the——; and I do further certify that I am satisfied that———, who subscribes the foregoing oath, is the person he represents himself to be; that he is a credible person; and that the statements made by him under said oath (or affirmation, as the case may be) are true.

[L.S.]

———,
U. S. Consul.

———

No.

I, ———, do solemnly and truly swear, that the invoice now produced, and hereunto annexed, contains a true and faithful account of the goods therein described, at their market value at ———, at the time the same were procured or manufactured, and of all the charges thereon; and that said invoice contains no discounts, bounties, or drawbacks, but such as have been actually allowed; and that said goods are the growth or product of the Provinoe of ———.

Sworn to and subscribed before me, at———, the —— day of ———, A.D. 18—, and of the independence of the United States of America the——; and I do further certify that I am satisfied that———, who subscribes the foregoing oath, is the person he represents himself to be; and that he is a credible person; and that the statements made by him under said oath are true.

———

U. S. Consul.

No. ———

I ———, do solemnly and truly swear, that the invoice now produced, and hereunto annexed, contains a true and faithful account of the goods therein described, at their market value at ———, at the time the same were procured, and of all the charges thereon; and that said invoice contains no discounts, bounties, or drawbacks but such as have been actually allowed; and that said goods are the growth or product of the Province of———.

Sworn to and subscribed before me, at ———, the —— day of ———, A.D. 18—.

———,
Justice of the Peace.

UNITED STATES' CONSULATE GENERAL,
B. N. A. Provinces.

———18

I certify that ———, the person signing the above certificate as a magistrate, is duly authorized to administer oaths by the laws of this Province, and I believe the statement contained in the above certificate to be true.

———

U. S. Consular Agent.

———

No.

UNITED STATES' CONSULATE GENERAL,
B. N. A. Provinces.

——————18

I certify that the goods or merchandise described in this invoice, are of the growth and production of the Province of———, and of the value within stated.

——————,
U. S. Consular Agent.

Date.

Copy of a Report of a Committee of the Honorable the Executive Council, approved by His Excellency the Governor General in Council on the 11th March, 1858.

On a memorial of the Montreal Ocean Steamship Co., the G. T. Railway Co. of Canada, the Montreal and Champlain Railway Co., and others, interested in the trade between Canada and the United States, representing that under the Consular Regulations issued by Wyman B. S. Moor, Esq., United States Consul General for the B. N. A. Provinces, dated Montreal, the 25th Feby. last, a fee of $2.00 for the Consular certificate and seal on every shipment or invoice of goods passing through the United States to or from Canada will become payable, that thereby a serious charge on the trade between Canada and the United States is imposed, which will not only materially embarrass the working of the Reciprocity Treaty, but also the existing system of passing goods in bond through the United States.

The Committee of Council respectfully recommend that a representation of the facts be made to the Treasury Department of the United States, through the British Minister at Washington, and that his earnest and early attention be solicited to obtain a withdrawal of that regulation, or such a modification thereof as shall relieve the trade from the charge now for the first time exacted.

Certified.
Wm. H. LEE,
Clerk, Privy Council.

Privy Council Office,
4th May, 1872.

(Copy.)

HER BRITANNIC MAJESTY'S LEGATION,
WASHINGTON, March 20th, 1858.

SIR,—I have the honor to acknowledge the receipt of Your Excellency's letter of the 15th instant, enclosing a report of a Committee of the Executive Council respecting the fees exacted by the Consul General of the United States.

I have lost no time bringing this matter under the notice of the Secretary of State whose reply will be transmitted to Your Excellency.

I have, &c.,
(Signed,) NAPIER.

His Excellency
Sir Edmund Head, Bart,
&c., &c., &c.

Lord Napier to Sir Edmund Head.

(Copy.)

WASHINGTON, June 3rd, 1858.

SIR,—I have the honor to transmit to Your Excellency herewith, copy of a letter addressed by the Secretary of the Treasury to the Secretary of State, respecting the fees demanded by the Consul General of the United States in Canada, for the signature of certificates and other official documents.

The reply of the Secretary of the Treasury does not afford much prospect of an abatement in the charges alluded to, but if Your Excellency will inform me more particularly of your views, and explain in what manner the fees might be reduced, with most benefit to the trade of the Provinces, I will again apply to General Cass on this subject.

I have, &c.,

(Signed.) NAPIER.

His Excellency
Sir Edmund Head.

Mr. Howell Cobb to the Hon. Lewis Cass.

(Copy.)

TREASURY DEPARTMENT, May 28th, 1858.

SIR,—I have the honor to acknowledge the receipt of your communication of the 25th March last, enclosing a copy of a letter to yourself from Lord Napier of the 24th of that month, together with a copy of a communication to him from the Governor General of Canada, and a report of the Executive Council, in reference to the fees demanded by the consular officers of the United States, in the exercise of their functions in regard to the trade between the United States and the British North American Provinces, and expressing an apprehension that these charges will materially embarrass the working of the Reciprocity Treaty and the transit traffic through the United States.

I have to state, in reply, that Consular officers of the United States are now established, in pursuance of law, within the Provinces, at the several points convenient to the commerce seeking the markets of the United States. The general law regulating importations into the United States, as well as a faithful execution of the Reciprocity Treaty, devolves on these officers certain duties which this Department is obliged to enforce, and to which the law has attached a specific compensation.

These fees, of which complaint is made, are for Consular certificates of origin in the case of merchandise claiming free entry into the United States under the Reciprocity Treaty of the 5th June, 1854, and certificates authenticating the oaths of non-resident owners to the correctness of their invoices, required by the supplemental collection law of the 1st March, 1823.

The Reciprocity Treaty of the 5th June, 1854, describes specifically the articles entitled to enter the United States free of duty if "of the growth and produce of the Provinces."

Some proof of origin is, of course, to be required. Such is the intimate and frequent commercial intercourse between the United States and the Provinces, a long and expensive frontier, but feebly guarded by officers of the Revenue, and such the difficulty of distinguishing Provincial products entitled to free entry under the Treaty, from the productions of other countries which may be imported through the Provinces into the United States, that the Provincial origin of merchandise claiming free entry should be as conclusively established as the circumstances will allow.

This proof the Department has required to be furnished in a form as little burdensome to commerce as is consistent with a proper protection of the public revenue, to wit: the affidavit, as to the origin of the merchandise by some person cognizant of the fact, before a local Magistrate, and authenticated by a Consular certificate, as a certificate of the consul alone; and these are required only in importations exceeding one hundred

dollars in value. The border traffic in articles of small value is relieved of the expense of Consular certificates, collectors at the several ports of entry being authorized to admit, free of duty, on any proof satisfactory to them, all importations of the value of one hundred dollars and less.

The other Consular services for which fees are allowed by law, the authentication of the oaths of non-resident owners expressly required by the supplemental collection law of March 1, 1823, this Department cannot, of course, dispense with, but to prevent the expense of two certificates, one of authentication and another of origin, it has combined the two in one, subject to the charge only of a single consular fee.

The foregoing are in substance the regulations adopted by the Department in pursuance of law. Less stringent they could not have been, consistent with the due protection of the public revenue and a faithful execution of the Treaty. Every effort has been made to the extent of my official power, as you will perceive, to relieve the trade from unnecessary burdens ; and I am quite confident that the legitimate interests of the commerce between the two countries will be promoted by a rigid enforcement of the new regulations.

I have, &c.,
(Signed.) HOWELL COBB,
Secretary of the Treasury.

The Honorable Lewis Cass,
&c., &c., &c.,

Sir Edmund Head to Lord Napier.

(Copy.)

GOVERNMENT HOUSE, TORONTO,
December 1st, 1858.

MY LORD,—With reference to former correspondence, I have thought it desirable, to obtain from the Commissioner of Customs in Canada, answers to the following queries :—

1st. Where the fees on Consular certificates are taken ?
2nd. By whom they are taken, and to whom the money goes ?
3rd. The amount of fee demanded on each certificate ?
4th. Whether the fees now taken are the same as before, or whether any increase has occurred, and by whom it was imposed ?
5th. How the issue of certificates could be simplified or consolidated, so that one deed might embrace more articles ?
6th. Whether the fees levied by British Consuls on certificates are lighter than those taken by American Consuls, and in what degree ?
7th. Whether any expedient for the mitigation of the American fees could be decided, which would satisfy the Canadian people ?

Such answers are annexed to this despatch that it may be in your Lordship's power to convince the Government of the United States of the fact that the course now pursued has a direct tendency to make the people of Canada doubt the benefit of the Reciprocity Treaty, and question the policy of opening our Canals and Fisheries to the citizens of the United States.

I have, &c.,
(Signed,) EDMUND HEAD.

His Excellency Lord Napier,
&c., &c., &c.,
Washington.

(Copy.)

Report upon the reference of a letter from Her Majesty's Minister at Washington, dated 16th November, 1858, relative to the fees charged by United States consular agents.

The undersigned has the honor, in obedience to the order of reference, to submit the following answers to the several points of enquiry referred to the Department :—

1st. The Consular fees are, it is presumed, taken at the office of the Consular agents in the principal Canadian cities, and at certain points on the frontier where the intercourse with the United States is most frequent.

2nd. The Consular agents are the immediate recipients of the fees, but the undersigned has no knowledge of the disposition made of such fees when collected.

3rd. The amount of the fee on such certificates is $2, but an additional charge of $1 seems to be incurred in the preparation of documents, which is probably paid to some broker or agent obtaining the Consular certificate.

4th. No certificates were required and no Consular fees demanded in reference to exports from Canada, under the Reciprocity Treaty, until the issuing of the American Treasury order of the 12th February last.

5th. Most of the articles comprised in the Schedule to the Reciprocity Treaty, are bulky, and as it sometimes happens that partial shipments only can be made, whether by water or by railroad, the shipper is bound to take a certificate for each partial shipment, for which he, on each occasion, pays the usual Consular fee of $2.

6th. The undersigned is not prepared to state what fees are exacted by British Consular agents at American Ports under similar circumstances.

7th. In answer to the last query proposed, it is respectfully submitted that the course adopted by the Canadian Government in reference to the admission of American produce, under the Reciprocity Treaty, is, in the opinion of the undersigned, sufficient to prevent frauds. The importer of any article from the United States under the Reciprocity Treaty, is bound to make, on the face of the entry at the Custom House, a declaration, equal to an oath in its legal consequences, that the articles for which he claims exemption are *bonâ fide* of the growth and produce of the United States. Indeed the very nature of the articles themselves is, in most cases, demonstrative of the fact ; and it is believed that few frauds, if any, have resulted from the facilities thus offered to the entry into Canada of Free Goods under the Reciprocity Treaty.

All of which is humbly submitted.

(Signed,) R. S. M. Bouchette,
Commissioner of Customs.

29th November, 1858.

(No. 66.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 29th April, 1872; For a Return of the number of double furrow ploughs entered at the Port of Guelph, the value of the said ploughs, the number on which duty has been paid, and the amount of said duty; the number (if any) which were passed free of duty, and the grounds on which the duty on such was remitted.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 2nd May, 1872.

(No. 67.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 20th May, 1872; For copies of all Correspondence and Reports relating to the building of the Dam across the outlet of Mud Lake, in the Township of Bedford, in the County of Addington, Ontario, in the year 1871.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 11th June, 1872.

[In accordance with the recommendation of the Joint Committee on Printing the above Returns are not printed.]

(No. 68.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 20th May, 1872; For copies of all Correspondence since 1st July, 1869, between this Government and the Government of Great Britain or any Foreign Government, or with Boards of Trade, with Individuals or with Shipping Masters, relating to the shipping or desertion of Seamen, or what is known as the Crimping business.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 7th June, 1872.

(No. 69.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 23rd May, 1872; For a Return of the Tariff of Fees under Cap. 46, Consolidated Statutes of Canada, now charged to Lumbermen for supplying specifications, and allowed to Cullers for measuring, &c., respectively.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 8th June, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing the above Returns are not printed.*]

(No. 70.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 20th May, 1872; For copies of all tenders received for the heating apparatus in the Post Office, Quebec, with the report of the Chief Architect of the Department of Public Works thereon; with all Orders in Council, and all papers relating thereto.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 10th June, 1872.

(No. 71.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 20th May, 1872; For copies of all tenders received by the Department of Public Works, for the excavation of earth and rock in deepening and improving Port Colborne Harbor, on Lake Erie, last year.

By Command.

J. C. AIKINS,
Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 10th June, 1872.

[*In accordance with the recommendation of the Joint Committee on Printing the above Returns are not printed.*]

(No. 72.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 19th April, 1872; For a Return shewing all the cases which have been decided by the Dominion Board of Arbitrators since Confederation, with the awards made, and all the amounts paid to the said Arbitrators as salaries and travelling expenses, or on any other account.

By Command.

J. C. AIKINS,

Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 10th June, 1872.

(No. 73.)

RETURN

To an ADDRESS of the HOUSE OF COMMONS, dated 20th May, 1872; For a Return of all correspondence between the Imperial Government and the Government of the Dominion, respecting the proposed arrangement for obtaining a portion of Her Majesty's Dockyard at Halifax as a terminus for the Intercolonial Railway.

By Command.

J. C. AIKINS,

Secretary of State.

DEPARTMENT OF THE SECRETARY OF STATE,
OTTAWA, 10th June, 1872.

[In accordance with the recommendation of the Joint Committee on Printing the above Returns are not printed.]